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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * * * * * * Welcome to STN International * * * * * * * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Apr 08 "Ask CAS" for self-help around the clock
NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4 Apr 09 ZDB will be removed from STN
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
 saved answer sets no longer valid
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
NEWS 15 Jul 30 NETFIRST to be removed from STN
NEWS 16 Aug 08 CANCERLIT reload
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
 now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985

NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,
 CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
 AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002

| | | | |
|----------------------|------------|---------|--|
| => file reg | | | |
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL | |
| FULL ESTIMATED COST | ENTRY | SESSION | |
| | 0.63 | 0.63 | |

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 16 OCT 2002 HIGHEST RN 462058-01-1
DICTIONARY FILE UPDATES: 16 OCT 2002 HIGHEST RN 462058-01-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

```
=> s indomethacin
L1      51 INDOMETHACIN

=> s naproxen
L2      75 NAPROXEN

=> s nimesulide
L3      6 NIMESULIDE

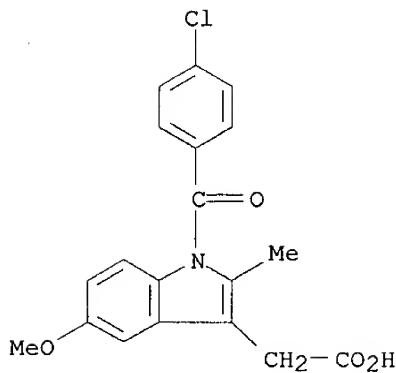
=> s nitroglycerin
L4      13 NITROGLYCERIN

=> s nitric oxide
      3362 NITRIC
      540527 OXIDE
L5      443 NITRIC OXIDE
      (NITRIC(W)OXIDE)
```

=> d 11 51

```
L1  ANSWER 51 OF 51  REGISTRY  COPYRIGHT 2002 ACS
RN  53-86-1  REGISTRY
CN  1H-Indole-3-acetic acid, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl- (9CI)
    (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN  Indole-3-acetic acid, 1-(p-chlorobenzoyl)-5-methoxy-2-methyl- (8CI)
OTHER NAMES:
CN  .alpha.-[1-(p-Chlorobenzoyl)-2-methyl-5-methoxy-3-indolyl]acetic acid
CN  1-(4-Chlorobenzoyl)-2-methyl-5-methoxyindole-3-acetic acid
```

CN 1-(4-Chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid
CN 1-(p-Chlorobenzoyl)-2-methyl-5-methoxy-3-indolylacetic acid
CN 1-(p-Chlorobenzoyl)-2-methyl-5-methoxyindole-3-acetic acid
CN 1-(p-Chlorobenzoyl)-5-methoxy-2-methyl-3-indolylacetic acid
CN 1-(p-Chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid
CN Amuno
CN Artrinovo
CN Artrivia
CN Bonidon Gel
CN Chrono-Indocid 75
CN Confortid
CN Dolcidium PL
CN Dolovin
CN Idomethine
CN Inacid
CN Indacin
CN Indo-Rectolmin
CN Indocid
CN Indocin
CN Indomecol
CN Indomed
CN Indomee
CN Indometacin
CN Indometacine
CN Indomethacin
CN Indomethacine
CN Indren
CN Infrocin
CN Inteban
CN Metacen
CN Metartril
CN Methazine
CN Metindol
CN Mezolin
CN N-(p-Chlorobenzoyl)-2-methyl-5-methoxy-3-indolylacetic acid
CN Reumacide
CN Sadoreum
FS 3D CONCORD
DR 37242-43-6, 91853-74-6
MF C19 H16 Cl N O4
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,
CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES,
DRUGPAT, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS*, SPECINFO,
SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11952 REFERENCES IN FILE CA (1962 TO DATE)
 147 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 11967 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 60 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d 12 75

L2 ANSWER 75 OF 75 REGISTRY COPYRIGHT 2002 ACS
 RN 9016-18-6 REGISTRY
 CN Esterase, carboxyl (8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN .alpha.-Carboxylesterase
 CN .alpha.-Esterase
 CN .beta.-Esterase
 CN 1,4-Butanediol diacrylate esterase
 CN 7-Amino-3-methoxy-3-cephem-4-carboxyl ester hydrolase
 CN Aliesterase
 CN Aminoacyl esterase
 CN B-Esterase
 CN Butyrate esterase
 CN Butyryl esterase
 CN Carbonic esterase
 CN Carboxyesterase
 CN Carboxyl ester hydrolase
 CN Carboxyl ester lipase
 CN Carboxyl esterase
 CN Carboxylate esterase
 CN Carboxylesterase B
 CN Carboxylesterase ES-1
 CN Carboxylic acid esterase
 CN Carboxylic ester hydrolase
 CN Carboxylic esterase
 CN Chirazyme E 1
 CN Cinnamate esterase
 CN Cinnamic acid esterase
 CN Cinnamoyl ester hydrolase
 CN Cinnamoyl esterase
 CN E.C. 3.1.1.1
 CN E.C. 3.1.1.12
 CN Egasyn
 CN Esterase
 CN Esterase 29

CN Esterase EP10
CN Esterase, B-
CN Fatty acid ethyl ester hydrolase
CN Fluazifop-butyl esterase
CN Ketoprofen alkyl esterase
CN Ketoprofen choline esterase
CN Methyl farnesoate esterase
CN Methylbutyrase
CN Methylbutyrate esterase
CN Monobutyrase
CN **Naproxen esterase**
CN Neutral esterase
CN Nonspecific carboxylesterase
CN Phthalate ester hydrolase
CN Phthalate esterase
CN Procaine esterase
CN Propionyl esterase
CN Prostaglandin A2 methylesterase
CN Proteins, egasyns
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY
DR 9025-97-2, 9027-84-3, 114514-18-0, 139074-54-7
MF Unspecified
CI MAN
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
CA, CABA, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN,
CSNB, EMBASE, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, PIRA, PROMT, TOXCENTER,
USPAT2, USPATFULL
Other Sources: EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

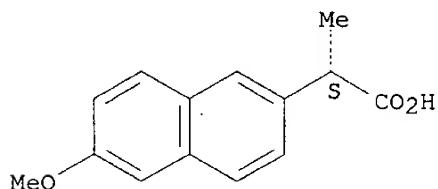
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
3152 REFERENCES IN FILE CA (1962 TO DATE)
33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3162 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d 12 74

L2 ANSWER 74 OF 75 REGISTRY COPYRIGHT 2002 ACS
RN 22204-53-1 REGISTRY
CN 2-Naphthaleneacetic acid, 6-methoxy-.alpha.-methyl-, (.alpha.S)- (9CI)
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Naphthaleneacetic acid, 6-methoxy-.alpha.-methyl-, (S)-
CN 2-Naphthaleneacetic acid, 6-methoxy-.alpha.-methyl-, (+)- (8CI)
OTHER NAMES:
CN **(+)-(S)-Naproxen**
CN **(+)-2-(6-Methoxy-2-naphthyl)propionic acid**
CN **(+)-6-Methoxy-.alpha.-methyl-2-naphthaleneacetic acid**
CN **(+)-Naproxen**
CN **(S)-(+)2-(6-Methoxy-2-naphthyl)propionic acid**
CN **(S)-(+)Naproxen**
CN **(S)-(+)Naproxene**
CN **(S)-2-(6-Methoxy-2-naphthyl)propanoic acid**
CN **(S)-2-(6-Methoxy-2-naphthyl)propionic acid**
CN **(S)-6-Methoxy-.alpha.-methyl-2-naphthaleneacetic acid**
CN **(S)-Naproxen**
CN **Apo-Naproxen**
CN CG 3117
CN **d-2-(6-Methoxy-2-naphthyl)propionic acid**
CN **d-Naproxen**

CN Equiproxen
 CN Naixan
 CN Naprosyn
 CN **Naproxen**
 FS STEREOSEARCH
 MF C14 H14 O3
 CI COM
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,
 CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*,
 DIOGENES, DRUGPAT, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
 MEDLINE, MRCK*, MSDS-OHS, PHAR, PHARMASEARCH, PROMT, RTECS*, SPECINFO,
 SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



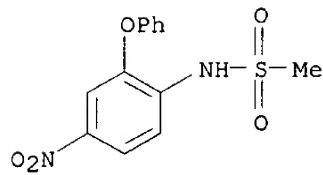
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3301 REFERENCES IN FILE CA (1962 TO DATE)
 135 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 3312 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d 13 6

L3 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2002 ACS
 RN 51803-78-2 REGISTRY
 CN Methanesulfonamide, N-(4-nitro-2-phenoxyphenyl)- (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 2-Phenoxy-4-nitromethanesulfonanilide
 CN 4'-Nitro-2'-phenoxymethanesulfonanilide
 CN 4-Nitro-2-phenoxymethanesulfonanilide
 CN Aulin
 CN Mesulid
 CN Nimepast
 CN **Nimesulide**
 CN Nisulid
 CN R 805
 CN R 805 (pharmaceutical)
 FS 3D CONCORD
 MF C13 H12 N2 O5 S
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CANCERLIT, CAPLUS, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
 DDFU, DETHERM*, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA,
 MEDLINE, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER,
 USAN, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

541 REFERENCES IN FILE CA (1962 TO DATE)
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
548 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN
L2 75 S NAPROXEN
L3 6 S NIMESULIDE
L4 13 S NITROGLYCERIN
L5 443 S NITRIC OXIDE

=> d 14 13

L4 ANSWER 13 OF 13 REGISTRY COPYRIGHT 2002 ACS
RN 55-63-0 REGISTRY
CN 1,2,3-Propanetriol, trinitrate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Nitroglycerin (8CI)
OTHER NAMES:
CN 1,2,3-Propanetriyl nitrate
CN Angibid
CN Anginine
CN Angiolingual
CN Angorin
CN Blasting oil
CN Cardamist
CN Chitamate
CN Deponit
CN Epinitril
CN Gilucor nitro
CN Glonoin
CN Glycerin trinitrate
CN Glycerol trinitrate
CN Glyceryl nitrate
CN Glyceryl trinitrate
CN GTN
CN Klavikordal
CN Lenitral
CN Minitran
CN Minitran (nitroglycerin)
CN Myoglycerin

CN NG
CN Niglin
CN Niglycon
CN Nitora
CN Nitrin
CN Nitrine
CN Nitrine-TDC
CN Nitro-Bid
CN Nitro-Dur
CN Nitro-lent
CN Nitro-Span
CN Nitrocardin
CN Nitroderm
CN Nitroglycerine
CN Nitroglycerol
CN Nitroglyn
CN Nitrol
CN Nitrol (pharmaceutical)
CN Nitrolan
CN Nitroletten
CN Nitrolingual
CN Nitrolowe
CN Nitromel
CN Nitrong
CN Nitropercuten
CN Nitrorectal
CN Nitroretard
CN **Trinitroglycerin**

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

FS 3D CONCORD

DR 8013-23-8, 9010-02-0, 105469-31-6, 80066-48-4

MF C3 H5 N3 O9

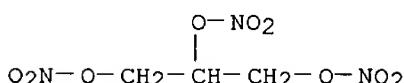
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU,
DETERM*, DIOGENES, DIPPR*, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN*,
HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,
NIOSHTIC, PDLCOM*, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO,
TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5967 REFERENCES IN FILE CA (1962 TO DATE)

30 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

5974 REFERENCES IN FILE CAPLUS (1962 TO DATE)

7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL

FULL ESTIMATED COST

ENTRY SESSION
34.56 35.19

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002
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FILE COVERS 1907 - 17 Oct 2002 VOL 137 ISS 16
FILE LAST UPDATED: 16 Oct 2002 (20021016/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> e micturition
E1 3 MICTURES/BI
E2 1 MICTURINATION/BI
E3 843 --> MICTURITION/BI
E4 9 MICTURITIONAL/BI
E5 2 MICTURITIONAL/BI
E6 26 MICTURITIONS/BI
E7 1 MICTURITRON/BI
E8 1 MICTUSTRUCTURES/BI
E9 1 MICTYRIDAE/BI
E10 10 MICTYRIS/BI
E11 9 MICU/BI
E12 1 MICU2/BI

=> se3-e6
SE3-E6 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s e3-e6
843 MICTURITION/BI
 9 MICTURITIONAL/BI
 2 MICTURITIONAL/BI
 26 MICTURITIONS/BI
L6 861 (MICTURITION/BI OR MICTURITIONAL/BI OR MICTURITIONAL/BI OR
 MICTURITIONS/BI)

=> e bladder
E1 3 BLADDED/BI
E2 1 BLADDELEITE/BI
E3 24458 --> BLADDER/BI

E4 1 BLADDER0/BI
E5 4 BLADDERED/BI
E6 1 BLADDERER/BI
E7 1 BLADDERFISTULATED/BI
E8 1 BLADDERING/BI
E9 9 BLADDERLESS/BI
E10 4 BLADDERNUT/BI
E11 1 BLADDERNUTS/BI
E12 1 BLADDEROF/BI

=> s e3
L7 24458 BLADDER/BI

=> e incontinence
E1 1 INCONTIGUOUS/BI
E2 1 INCONTINANCE/BI
E3 1957 --> INCONTINENCE/BI
E4 2 INCONTINENCEGUARD/BI
E5 1 INCONTINENCESUPPLIES/BI
E6 1 INCONTINENCY/BI
E7 103 INCONTINENT/BI
E8 42 INCONTINENTIA/BI
E9 1 INCONTINENTS/BI
E10 1 INCONTINUE/BI
E11 6 INCONTINUITY/BI
E12 6 INCONTINUOUS/BI

=> s e3-e7
1957 INCONTINENCE/BI
2 INCONTINENCEGUARD/BI
1 INCONTINENCESUPPLIES/BI
1 INCONTINENCY/BI
103 INCONTINENT/BI
L8 2013 (INCONTINENCE/BI OR INCONTINENCEGUARD/BI OR INCONTINENCESUPPLIES
/BI OR INCONTINENCY/BI OR INCONTINENT/BI)

=> e urinary
E1 1 URINARILY/BI
E2 1 URINARIS/BI
E3 107957 --> URINARY/BI
E4 1 URINARYALBUMIN/BI
E5 1 URINARYCONCNS/BI
E6 3 URINARYEXCRETION/BI
E7 1 URINARYHYDROXYPROLINE/BI
E8 1 URINARYK/BI
E9 1 URINARYKYNURENINE/BI
E10 4 URINARYL/BI
E11 1 URINARYLYL/BI
E12 1 URINARYMUCOPROTEINS/BI

=> s e3
L9 107957 URINARY/BI

=> s 14
L10 6048 L4

=> s 15
L11 76683 L5

=> s 16 and l10
L12 1 L6 AND L10

=> d 112 all

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN 1999:403617 CAPLUS
DN 131:179779
TI Effect of K⁺ channel openers, KRN2391 and Ki1769, and nitroglycerin on the urinary tract of rats *in vivo*
AU Kontani, Hitoshi; Jinkawa, Masumi; Shiraoya, Chisato; Nagashima, Akiko
CS Department of Pharmacology, Faculty of Pharmaceutical Sciences, Hokuriku University, Kanazawa, 920-1181, Japan
SO Japanese Journal of Pharmacology (1999), 80(2), 143-153
CODEN: JJPAAZ; ISSN: 0021-5198
PB Japanese Pharmacological Society
DT Journal
LA English
CC 1-12 (Pharmacology)
AB The effects of KRN2391 (N-cyano-'N-(nitroxyethyl)-3-pyridine carboximidamide methanesulfonate), which possesses ATP-sensitive potassium (K⁺) channel opening (KCO) activity and nitrate activity; Ki1769 (N-cyano-'N-(phenylethyl)-3-pyridinecarboximidamide methanesulfonate), which possesses only KCO activity; and nitroglycerin (NG) were detd. on the motility of the ureter, urinary bladder and urethra of rats. Bladder contraction was induced by infusion of fluid into the bladder of conscious rats and recorded on a cystometrogram. KRN2391 and Ki1769 (both 0.3 mg/kg, i.v.) prolonged the **micturition** interval immediately after the injection, but NG (5 mg/kg, i.v.) did not. Peristaltic movement of the ureter, recorded in anesthetized rats, was inhibited by i.v. injection of KRN2391 and Ki1769 (both 0.03 mg/kg). However, when NG, NANO₂, N-nitro L-arginine methylester and methylene blue were applied directly to the ureter, no change in movement of the ureter was detected. KRN2391 (0.03 mg/kg, i.v.) and Ki1769 (0.3 mg/kg, i.v.) reduced the resistance to fluid infusion through the urethral lumen in anesthetized rats, whereas NG (0.5 mg/kg, i.v.) only reduced this resistance transiently. These results indicate that KCO activity had an inhibitory effect on the motility of the ureter, bladder and urethra. On the other hand, nitrate activity had a inhibitory effect on urethral tonus, corresponding to that induced by KCO activity.
ST urinary tract potassium channel opener nitroglycerin
IT Urinary tract
 (effect of K⁺ channel openers and nitroglycerin on urinary tract)
IT Ion channel openers
 (potassium; effect of K⁺ channel openers and nitroglycerin on urinary tract)
IT 55-63-0, Nitroglycerin 133300-00-2, Ki1769 134431-49-5,
 KRN2391
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (effect of K⁺ channel openers and nitroglycerin on urinary tract)
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Alm, P; J Auton Nerv Sys 1995, V56, P105 CAPLUS
(2) Bennett, B; J Urol 1995, V153, P2004 MEDLINE
(3) Chung, B; J Urol 1996, V155, P2090 CAPLUS
(4) Foster, C; Br J Pharmacol 1989, V97, P281 CAPLUS
(5) Howe, B; J Pharmacol Exp Ther 1995, V274, P884 CAPLUS
(6) Hux, X; Neuroscience 1987, V23, P693
(7) Ishibashi, T; Naunyn Schmiedebergs Arch Pharmacol 1992, V346, P94 CAPLUS
(8) Jinno, Y; Br J Pharmacol 1992, V106, P906 CAPLUS
(9) Kashiwabara, T; Eur J Pharmacol 1990, V183, P1266P
(10) Kashiwabara, T; Eur J Pharmacol 1991, V196, P1 CAPLUS
(11) Kontani, H; Int J Urol 1997, V4, P394 MEDLINE

- (12) Kontani, H; Jpn J Pharmacol 1988, V48, P31 CAPLUS
- (13) Kontani, H; Jpn J Pharmacol 1990, V53, P427 CAPLUS
- (14) Kontani, H; Jpn J Pharmacol 1993, V62, P331 CAPLUS
- (15) Kontani, H; Jpn J Pharmacol 1993, V63, P503 CAPLUS
- (16) Maggi, C; J Pharmacol Exp Ther 1988, V246, P308 CAPLUS
- (17) Malmgren, A; J Urol 1989, V142, P1134
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L13 27 L6 AND L11

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L13 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1999:338885 CAPLUS
DN 131:142389
TI Co-localization of carbon monoxide and nitric oxide synthesizing enzymes in the human urethral sphincter
AU Ho, Kossen M. T.; Ny, Lars; McMurray, Gordon; Andersson, Karl-Erik; Brading, Alison F.; Noble, Jeremy G.
CS Oxford Continence Group, Department of Urology, The Churchill Hospital, Oxford, UK
SO Journal of Urology (Baltimore) (1999), 161(6), 1968-1972
CODEN: JOURAA; ISSN: 0022-5347
PB Lippincott Williams & Wilkins
DT Journal
LA English
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1998:383264 CAPLUS
DN 129:104501
TI Oxytocin-induced stimulation and inhibition of bladder activity in normal, conscious rats-influence of nitric oxide synthase inhibition
AU Pandita, R. K.; Nylen, A.; Andersson, K. -E.
CS Department of Clinical Pharmacology, Lund University Hospital, Lund, Swed.
SO Neuroscience (Oxford) (1998), 85(4), 1113-1119
CODEN: NRSCDN; ISSN: 0306-4522
PB Elsevier Science Ltd.
DT Journal
LA English

L13 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1998:248002 CAPLUS
DN 129:76914
TI Colocalization of nitric oxide synthase and some neurotransmitters in the intramural ganglia of the guinea pig urinary bladder
AU Zhou, Yuan; Ling, Eng-Ang
CS Department of Anatomy, Faculty of Medicine, National University of Singapore, 119260, Singapore
SO Journal of Comparative Neurology (1998), 394(4), 496-505
CODEN: JCNEAM; ISSN: 0021-9967
PB Wiley-Liss, Inc.
DT Journal
LA English

L13 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1998:197390 CAPLUS
DN 128:253008
TI Pharmaceutical compositions and methods using alcohols and analogs thereof for regulation of melanin content and treatment of skin and other diseases
IN Brown, David A.; Khorlin, Alexander A.; Lesiak, Krystyna; Ren, Wu Yun
PA Codon Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|------|--|-----------------|----------|
| PI WO 9811882 | A1 | 19980326 | WO 1997-US16642 | 19970918 |
| | W: | AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | |
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| AU 740783 | B2 | 20011115 | | |
| US 5990177 | A | 19991123 | US 1997-933144 | 19970918 |
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| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | |
| US 6110975 | A | 20000829 | US 1997-933145 | 19970918 |
| WO 9855085 | A1 | 19981210 | WO 1998-US5346 | 19980318 |
| | W: | AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | |
| AU 9865659 | A1 | 19981221 | AU 1998-65659 | 19980318 |
| US 6214888 | B1 | 20010410 | US 1998-86547 | 19980528 |
| US 6290937 | B1 | 20010918 | US 1998-85917 | 19980528 |
| US 2002141952 | A1 | 20021003 | | |
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| US 1997-933143 | B2 | 19970918 | | |
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| WO 1998-US5346 | W | 19980318 | | |
| OS MARPAT 128:253008 | | | | |

L13 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1997:808611 CAPLUS
DN 128:149538
TI Capsaicin-induced bladder overactivity and nociceptive behavior in conscious rats: Involvement of spinal nitric oxide
AU Pandita, Raj Kumar; Persson, Katarina; Andersson, Karl-Erik
CS Department of Clinical Pharmacology, Lund University Hospital, 221 85 Lund, Swed.
SO Journal of the Autonomic Nervous System (1997), 67(3), 184-191
CODEN: JASYDS; ISSN: 0165-1838
PB Elsevier Science B.V.
DT Journal

LA English

L13 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1997:420528 CAPLUS
DN 127:120304
TI Expression of neuropeptides and nitric oxide synthase in neurons innervating the inflamed rat urinary bladder
AU Callsen-Cencic, Peter; Mense, Siegfried
CS Universitaet Heidelberg, Institut fuer Anatomie und Zellbiologie III, Im Neuenheimer Feld 307, D-69120, Heidelberg, Germany
SO Journal of the Autonomic Nervous System (1997), 65(1), 33-44
CODEN: JASYDS; ISSN: 0165-1838
PB Elsevier
DT Journal
LA English

L13 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1997:351510 CAPLUS
DN 127:79213
TI Reflex pathways controlling urethral striated and smooth muscle function in the male rat
AU Kakizaki, Hidehiro; Fraser, Matthew O.; De Groat, William C.
CS Dep. Pharmacol., Univ. Pittsburgh Sch. Med., Pittsburgh, PA, 15261, USA
SO American Journal of Physiology (1997), 272(5, Pt. 2), R1647-R1656
CODEN: AJPHAP; ISSN: 0002-9513
PB American Physiological Society
DT Journal
LA English

L13 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1997:297670 CAPLUS
DN 127:16190
TI Urinary bladder-urethral sphincter dysfunction in mice with targeted disruption of neuronal nitric oxide synthase models idiopathic voiding disorders in humans
AU Burnett, Arthur L.; Calvin, David C.; Chamness, Shelly L.; Liu, Jian-Xiang; Nelson, Randy J.; Klein, Sabra L.; Dawson, Valina L.; Dawson, Ted M.; Snyder, Solomon H.
CS Dep. Urol. Mol. Sci., Johns Hopkins Univ. Sch. Med., Baltimore, MD, 21205, USA
SO Nature Medicine (New York) (1997), 3(5), 571-574
CODEN: NAMEFI; ISSN: 1078-8956
PB Nature Publishing Co.
DT Journal
LA English

L13 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1997:185707 CAPLUS
DN 126:223275
TI Distribution of NADPH-diaphorase and nitric oxide synthase-containing neurons in the intramural ganglia of guinea pig urinary bladder
AU Zhou, Y.; Tan, C. K.; Ling, E. A.
CS Dep. Anatomy, Fac. Med., National Univ. Singapore, 119260, Singapore
SO Journal of Anatomy (1997), 190(1), 135-145
CODEN: JOANAY; ISSN: 0021-8782
PB Cambridge University Press
DT Journal
LA English

L13 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1997:185704 CAPLUS
DN 126:210016

TI Distribution of NADPH-diaphorase and nitric oxide synthase-containing neurons in the intramural ganglia of guinea pig urinary bladder
AU Zhou, Y.; Tan, C. K.; Ling, E. A.
CS Faculty Medicine, Natl. Univ. Singapore, Singapore, Singapore
SO Journal of Anatomy (1997), 190(1), 135-145
CODEN: JOANAY; ISSN: 0021-8782
PB Cambridge University Press
DT Journal
LA English

L13 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1997:146314 CAPLUS
DN 126:210207
TI Vesicourethral function in mice with genetic disruption of neuronal nitric oxide synthase
AU Sutherland, Ronald S.; Kogan, Barry A.; Piechota, Hans J.; Gredt, David S.
CS Dep. Urology, Physiology, Univ. California Sch. Med., San Francisco, CA, USA
SO Journal of Urology (Baltimore) (1997), 157(3), 1109-1116
CODEN: JOURAA; ISSN: 0022-5347
PB Williams & Wilkins
DT Journal
LA English

L13 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:639839 CAPLUS
DN 125:292613
TI A pharmacological and histochemical study of hamster urethra and the role of urothelium
AU Pinna, Christian; Ventura, Sabatino; Puglisi, Lina; Burnstock, Geoffrey
CS Dept. of Anatomy and Developmental Biology, Univ. College London, London, WC1E 6BT, UK
SO British Journal of Pharmacology (1996), 119(4), 655-662
CODEN: BJPCBM; ISSN: 0007-1188
PB Stockton
DT Journal
LA English

L13 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:551707 CAPLUS
DN 125:239097
TI The effect of NG-monomethyl-L-arginine on bladder function
AU Theobald, Robert J. Jr.
CS Department of Pharmacology, Kirksville College of Osteopathic Medicine, 800 West Jefferson Street, Kirksville, Kirksville, USA
SO European Journal of Pharmacology (1996), 311(1), 73-78
CODEN: EJPHAZ; ISSN: 0014-2999
PB Elsevier
DT Journal
LA English

L13 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:438470 CAPLUS
DN 125:111196
TI Role of spinal nitric oxide in the facilitation of the **micturition** reflex by bladder irritation
AU Kakizaki, Hidehiro; De Groat, William C.
CS School Medicine, University Pittsburgh, Pittsburgh, PA, 15261, USA
SO Journal of Urology (Baltimore) (1996), 155(1), 355-360
CODEN: JOURAA; ISSN: 0022-5347
PB Williams & Wilkins
DT Journal

LA English

L13 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:427961 CAPLUS
DN 125:82655
TI Characterization of nitric oxide synthase activity in sheep urinary tract:
functional implications
AU Garcia-Pascual, A.; Costa, G.; Labadia, A.; Persson, K.; Triguero, D.
CS Faculty of Veterinary Sciences, Complutense University, Madrid, 28040,
Spain
SO British Journal of Pharmacology (1996), 118(4), 905-914
CODEN: BJPCBM; ISSN: 0007-1188
PB Stockton
DT Journal
LA English

L13 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1995:341899 CAPLUS
DN 122:259288
TI Nitric oxide synthase activity in the human urogenital tract
AU Ehren, I.; Adolfsson, J.; Wiklund, N.P.
CS Department of Urology, Karolinska Hospital, Stockholm, S-171-76, Swed.
SO Urological Research (1994), 22(5), 287-90
CODEN: URLRA5; ISSN: 0300-5623
DT Journal
LA English

L13 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1995:69559 CAPLUS
DN 122:1508
TI Ontogeny of nitric oxide synthase in the lumbosacral spinal cord of the
neonatal rat
AU Vizzard, Margaret A.; Erdman, Susan L.; Foerstermann, Ulrich; de Groat,
William C.
CS University of Pittsburgh, School of Medicine, Department of Pharmacology,
13th floor, Biomedical Science Tower, Pittsburgh, PA, 15261, USA
SO Developmental Brain Research (1994), 81(2), 201-17
CODEN: DBRRDB; ISSN: 0165-3806
DT Journal
LA English

L13 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1992:568493 CAPLUS
DN 117:168493
TI Effects of inhibition of the L-arginine/nitric oxide pathway in the rat
lower urinary tract in vivo and in vitro
AU Persson, K.; Igawa, Y.; Mattiasson, A.; Andersson, K. E.
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, Swed.
SO British Journal of Pharmacology (1992), 107(1), 178-84
CODEN: BJPCBM; ISSN: 0007-1188
DT Journal
LA English

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L13 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:427961 CAPLUS
DN 125:82655
TI Characterization of nitric oxide synthase activity in sheep urinary tract:
functional implications
AU Garcia-Pascual, A.; Costa, G.; Labadia, A.; Persson, K.; Triguero, D.

CS Faculty of Veterinary Sciences, Complutense University, Madrid, 28040, Spain
SO British Journal of Pharmacology (1996), 118(4), 905-914
CODEN: BJPCBM; ISSN: 0007-1188
PB Stockton
DT Journal
LA English
CC 13-1 (Mammalian Biochemistry)
AB To define further the role of NO in urinary tract function, the authors measured the presence of nitric oxide synthase (NOS) activity, and its relation with functional NO-mediated responses to elec. field stimulation (EFS) in the urethra, the bladder detrusor muscle, and the ureter from sheep. NOS activity was assayed by the conversion of L-[14C]-arginine to L-[14C]-citrulline. Endogenous prodn. of citrulline was confirmed by TLC. NOS activity was detected in the cytosolic fraction from tissue homogenates with the following regional distribution (pmol citrulline/mg protein/min): urethra (33 .+- . 3.3), detrusor (13.1 .+- . 1.1) and ureter (1.5 .+- . 0.2). No activity was detected in the particulate fraction of any region. NOS activity was dependent on Ca²⁺-calmodulin and required exogenously added NADPH and tetrahydrobiopterin (BH4) for maximal activity. Exclusion of calmodulin from the incubation mixt. did not modify NOS activity, but it was significantly reduced in the presence of the calmodulin antagonist, calmidazolium, suggesting the presence of enough endogenous calmodulin to sustain the obsd. NOS activity. NOS activity was inhibited to a greater extent by NG-nitro-L-arginine (L-NOARG) and its Me ester (L-NAME) than by NG-monomethyl-L-arginine (L-NMMA), whereas 7-nitroindazole (7-NI) was a weak inhibitor, and L-canavanine had no effect. Citrulline formation could be inhibited by superoxide dismutase in an oxyHb-sensitive manner, suggesting feedback inhibition of NOS by NO. EFS induced prominent NO-mediated relaxations in the urethra, whereas minor or no responses were obsd. in the detrusor and the ureter, resp. Urethral relaxations to EFS were inhibited by NOS inhibitors with the rank order of potency: L-NOARG = L-NAME > 7-NI > L-NMMA. Thus, the presence of NO-synthesizing enzyme activity in the sheep urinary tract was demonstrated which showed similar characteristics to the constitutive NOS isoform found in brain. It is suggested that the enzymic activity measured in the urethral muscle layer may account for the NO-mediated urethral relaxation during **micturition**, whereas regulation of detrusor and ureteral motor function by NOS-contg. nerves is less likely.
ST nitric oxide synthase distribution urinary tract
IT Ureter
IT Urethra
 (distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)
IT Bladder
 (detrusor muscle, distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)
IT 125978-95-2, Nitric oxide synthase
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
 (distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)

=> d 113 23

L13 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:438470 CAPLUS
DN 125:111196
TI Role of spinal nitric oxide in the facilitation of the **micturition**

AU reflex by bladder irritation
AU Kakizaki, Hidehiro; De Groat, William C.
CS School Medicine, University Pittsburgh, Pittsburgh, PA, 15261, USA
SO Journal of Urology (Baltimore) (1996), 155(1), 355-360
CODEN: JOURAA; ISSN: 0022-5347
PB Williams & Wilkins
DT Journal
LA English

=> d 113 all

L13 ANSWER 1 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 2002:665046 CAPLUS
DN 137:226422
TI Increased urinary nitrite excretion in primary enuresis: effects of indomethacin treatment on urinary and serum osmolality and electrolytes, urinary volumes and nitrite excretion
AU Al-Waili, N. S.
CS Dubai Specialized Medical Center and Medical Research Laboratories, Islamic Establishment for Education, Dubai, United Arab Emirates
SO BJU International (2002), 90(3), 294-301
CODEN: BJINFO; ISSN: 1464-4096
PB Blackwell Science Ltd.
DT Journal
LA English
CC 1-8 (Pharmacology)
AB Objectives: To assess urinary nitrite excretion, a stable end product of nitric oxide (NO), in patients with enuresis and in normal controls, and to evaluate the effects of indomethacin (a potent prostaglandin synthesis inhibitor) on urinary nitrite excretion, other urinary variables and bladder capacity. Patients and methods: The study comprised 10 patients with primary enuresis and 10 normal comparable controls (age range 6-14 yr). Nitrite was assayed in 'spot' morning urine samples in both the enuretics and normal controls. Enuretics were then given 50 mg indomethacin suppositories each night; urine vol., urinary osmolality and electrolytes, serum osmolality and electrolytes and urinary nitrite were assayed before indomethacin treatment and after 15 days of treatment. Results: The mean (SD) urinary nitrite excretion was 24.4 (19.6) .mu.mol/L in normal children and 275.9 (111.2) .mu.mol/L in enuretics ($P < 0.05$). With indomethacin, the urinary nitrite concn. was significantly decreased to 141 (45.1) .mu.mol/L ($P < 0.05$) and assocd. with a significant redn. in bed-wetting episodes and voiding frequency. The functional bladder capacity was < 70% of the predicted value for age in six of the patients: they had significant improvements on indomethacin, to values similar to those in patients with a nearly normal functional bladder capacity. Indomethacin decreased the 24-h urinary vol. by 41%, the night vol. by 40%, clearance of free water by 46% and increased the day:night urinary vol. ratio by 55%. The abs. amts. of urinary calcium, magnesium, phosphorus, urea, creatinine, and glucose were lower on indomethacin, although not statistically significantly so. Indomethacin decreased the 24-h urinary and 'spot' morning osmolality and osmotic clearance. There were no significant changes in serum osmolality and electrolyte concns. Indomethacin also decreased the abs. amt. of urinary sodium, chloride and potassium, fractional sodium and potassium excretion, and filtered sodium. Creatinine clearance was decreased by 20% ($P > 0.05$) and normal 24-h urinary protein was significantly lower, by 47%, after indomethacin treatment ($P < 0.05$). Conclusion: Urinary nitrite excretion increased significantly in patients with primary nocturnal enuresis; indomethacin markedly reduced bed-wetting episodes and decreased the frequency of voiding in enuretics with small or normal functional bladder capacity, which was assocd. with a significant decrease in urinary nitrite excretion. Indomethacin reduced

bed-wetting by decreasing the urine vol., clearance of free water and urinary electrolytes, and through possible effects on bladder and urethral contraction, by inhibiting NO and prostaglandin synthesis. NO and prostaglandins might be important in the pathogenesis of primary enuresis.

ST prostaglandin inhibitor indomethacin nitric oxide diuresis nocturnal enuresis

IT Development, mammalian postnatal
(adolescent; indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT Development, mammalian postnatal
(child; indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT **Micturition**
(enuresis; indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT Blood serum
Diuresis
Electrolytes
Human
Osmolality
Urine
(indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT Prostaglandins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT 50-99-7, Glucose, biological studies 57-13-6, Urea, biological studies
60-27-5, Creatinine 7439-95-4, Magnesium, biological studies
7440-09-7, Potassium, biological studies 7440-23-5, Sodium, biological studies
7440-70-2, Calcium, biological studies 7723-14-0, Phosphorus, biological studies
10102-43-9, Nitric oxide, biological studies
14797-65-0, Nitrite, biological studies 16887-00-6, Chloride, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT 53-86-1, Indomethacin
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

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L13 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2002 ACS
 AN 1996:438470 CAPLUS
 DN 125:111196
 TI Role of spinal nitric oxide in the facilitation of the **micturition** reflex by bladder irritation
 AU Kakizaki, Hidehiro; De Groat, William C.
 CS School Medicine, University Pittsburgh, Pittsburgh, PA, 15261, USA
 SO Journal of Urology (Baltimore) (1996), 155(1), 355-360
 CODEN: JOURAA; ISSN: 0022-5347
 PB Williams & Wilkins
 DT Journal
 LA English
 CC 13-6 (Mammalian Biochemistry)
 Section cross-reference(s): 2
 AB Nitric oxide (NO) is known to have an important transmitter function at peripheral synapses in the urogenital tract and has also been implicated in the transmission of nociceptive information in the spinal cord. The present study evaluated the role of NO in the central **micturition** reflex pathway. We examd. the effect of N-nitro-L-arginine Me ester (L-NAME), an inhibitor of NO synthase, on **micturition** reflexes induced by continuous infusion of saline or 0.1% acetic acid (a noxious stimulus) into the bladder in urethane-anesthetized female rats. Bladder and external urethral sphincter function were monitored with a continuous cystometrogram (CMG) and electromyog. (EMG). Intrathecal injection of L-NAME (0.01 to 1 .mu.mol.) did not significantly change the CMG or sphincter EMG during saline infusion. Infusion of acetic acid decreased the intercontraction interval (ICI), indicating a decrease in the vol.

threshold for inducing **micturition**. Subsequent intrathecal administration of L-NAME partially reversed the decreased ICI in a dose-dependent manner, but did not change the amplitude of bladder contractions: 0.01, 0.1 and 1 .mu.mol. of L-NAME produced increases of 25%, 31% and 56% in the ICI. D-NAME, the inactive stereoisomer had no effect. This effect of L-NAME was reversed by injection of L-arginine (2 .mu.mol. intrathecally) which, by itself, did not alter ICI during saline infusion or acetic acid infusion. These results indicate that: (1) spinal NO contg. pathways do not play a role in the normal **micturition** reflex, (2) NO is involved at the spinal level in the facilitation of the **micturition** reflex by nociceptive bladder afferents activated by noxious chem. irritation of the bladder.

ST nitric oxide spinal **micturition** reflex bladder
IT Bladder
Pain
Spinal cord
Urethra
 (spinal nitric oxide in facilitation of **micturition** reflex by bladder irritation)
IT Reflex
 (micturition, spinal nitric oxide in facilitation of **micturition** reflex by bladder irritation)
IT 10102-43-9, Nitrogen oxide (NO), biological studies
125978-95-2, Synthetase, nitric oxide
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (spinal nitric oxide in facilitation of **micturition** reflex by bladder irritation)

=> d 113 22

L13 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:551707 CAPLUS
DN 125:239097
TI The effect of NG-monomethyl-L-arginine on bladder function
AU Theobald, Robert J. Jr.
CS Department of Pharmacology, Kirksville College of Osteopathic Medicine,
800 West Jefferson Street, Kirksville, Kirksville, USA
SO European Journal of Pharmacology (1996), 311(1), 73-78
CODEN: EJPHAZ; ISSN: 0014-2999
PB Elsevier
DT Journal
LA English

=> d 113 22 all

L13 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:551707 CAPLUS
DN 125:239097
TI The effect of NG-monomethyl-L-arginine on bladder function
AU Theobald, Robert J. Jr.
CS Department of Pharmacology, Kirksville College of Osteopathic Medicine,
800 West Jefferson Street, Kirksville, Kirksville, USA
SO European Journal of Pharmacology (1996), 311(1), 73-78
CODEN: EJPHAZ; ISSN: 0014-2999
PB Elsevier
DT Journal
LA English
CC 2-8 (Mammalian Hormones)
Section cross-reference(s): 13

AB Recent studies have demonstrated the presence of nitric oxide synthase (NO synthase) in lower urinary tract tissues, however, its role in the detrusor is unclear. The current study was designed to det. if NO synthase inhibition alters detrusor activities, including **micturition** vol. threshold, and inhibition of pelvic nerve-evoked contractions by various stimuli. In naive, anesthetized adult cats, inhibition of pelvic nerve-evoked bladder contractions, induced by hypogastric nerve stimulation or the intraarterial administration of NA, ATP, adenosine, .beta.,.gamma.-methylene ATP and 2-methylthio ATP, was measured before and after inhibition of NO synthase. The **micturition** vol. threshold was also measured before and after NO synthase inhibition. L-NMMA decreased the **micturition** vol. threshold by 38% (2 mg intravesical administration) or 80% (4 mg/kg i.a.). The magnitude of the **micturition** contractions was modestly increased. These results, and information in the literature, indicate that NO may play a role in the collection phase of the bladder cycle and any alteration of nitric oxide availability could induce or allow development of various bladder malfunctions, such as small bladder diseases, like interstitial cystitis.

ST nitric oxide synthase bladder function

IT Bladder
(nitric oxide synthase role in bladder function)

IT 10102-43-9, Nitric oxide, biological studies 125978-95-2
, Nitric oxide synthase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nitric oxide synthase role in bladder function)

=> d 113 21 all

L13 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2002 ACS
AN 1996:639839 CAPLUS
DN 125:292613
TI A pharmacological and histochemical study of hamster urethra and the role of urothelium
AU Pinna, Christian; Ventura, Sabatino; Puglisi, Lina; Burnstock, Geoffrey
CS Dept. of Anatomy and Developmental Biology, Univ. College London, London,
WC1E 6BT, UK
SO British Journal of Pharmacology (1996), 119(4), 655-662
CODEN: BJPCBM; ISSN: 0007-1188
PB Stockton
DT Journal
LA English
CC 1-8 (Pharmacology)
Section cross-reference(s): 13
AB 1 Elec. field stimulation (EFS) of circular strips of hamster proximal urethra caused frequency-dependent relaxations at raised tone. Phentolamine (10⁻⁶ M), propranolol (10⁻⁶M) and atropine (10⁻⁶ M) were present throughout the expt. Neurogenic relaxation was attenuated by L-NG-nitroarginine Me ester (L-NAME) (10⁻⁴M), was restored by L-arginine (3 x 10⁻³M) but not by D-arginine (3 x 10⁻³M) and completely blocked by tetrodotoxin (10⁻⁶M). Neurogenic relaxation was also reduced by suramin (10⁻⁴M) and totally blocked by suramin together with L-NAME. Strips of hamster urethra devoid of urothelium showed little, if any, relaxant response to EFS. 2 An immunohistochem. study showed nitric oxide synthase-immunoreactive nerves in the smooth muscle layers and in the lamina propria, just beneath the urothelium, but not nitric oxide synthase (NOS) staining in the urothelial layer. 3 Noradrenaline elicited a significantly greater contraction in strips without urothelium than in control strips. L-NAME (10⁻⁴M) did not affect noradrenaline-induced contraction in both control and urothelium-free strips. The contractile response to acetylcholine was not dependent on the presence or absence of

urothelium. Nevertheless the response induced by exogenous acetylcholine (10-3M) was increased by L-NAME (10-4M), both in intact and in urothelium-free strips. 4 Prostaglandin E2 (10-8-5 x 10-6 M) and 2-methyl-thio-ATP (10-9-10-5 M) relaxed proximal urethra. Suramin (10-4M) significantly inhibited the relaxation induced by 2-methyl-thio-ATP. The amplitude of these responses was not significantly different between intact and urothelium-free strips and was not blocked by L-NAME (10-4M). 5 These results suggest that nitric oxide (NO) is the principal transmitter involved in the non-adrenergic, non-cholinergic (NANC) relaxation of hamster proximal urethra possibly together with another inhibitory transmitter released from nerves. NO can be released from nerves located in the circular smooth muscle layer and in the lamina propria rather than in the urothelium. The reduced neurogenic relaxation in urothelium-free preps. suggests that a NO-dependent inhibitory factor is released from the urothelium. In addn., ATP and prostaglandin E2 may be involved, together with NO, in the urethra during micturition

ST drug urethra **micturition** urothelium ATP PGE2; nitric oxide
urethra urothelium ATP PGE2
IT Urethra
(a pharmacol. and histochem. study of hamster urethra and the role of
urothelium)
IT Neurohormones
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)
(neurotransmitters, a pharmacol. and histochem. study of hamster
urethra and the role of urothelium)
IT 50-60-2, Phentolamine 51-41-2, Noradrenaline 51-84-3, Acetylcholine,
biological studies 56-65-5, ATP, biological studies 74-79-3,
L-Arginine, biological studies 145-63-1, Suramin 157-06-2, D-Arginine
363-24-6, Prostaglandin E2 4368-28-9, Tetrodotoxin **10102-43-9**,
Nitric oxide, biological studies 50903-99-6, L-NAME **125978-95-2**
, Nitric oxide synthase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)
(a pharmacol. and histochem. study of hamster urethra and the role of
urothelium)

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(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN
L2 75 S NAPROXEN
L3 6 S NIMESULIDE
L4 13 S NITROGLYCERIN
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION
L6 861 S E3-E6
E BLADDER
L7 24458 S E3
E INCONTINENCE
L8 2013 S E3-E7
E URINARY
L9 107957 S E3
L10 6048 S L4
L11 76683 S L5
L12 1 S L6 AND L10

L13

27 S L6 AND L11

=> e detrusor

E1 1 DETRUSION/BI
E2 2 DETRUSITOL/BI
E3 963 --> DETRUSOR/BI
E4 1 DETRUSORECTOMY/BI
E5 16 DETRUSORS/BI
E6 4 DETRUSSOR/BI
E7 1 DETRYDROGENASE/BI
E8 1 DETRYMENTAL/BI
E9 1 DETRYPSINIZED/BI
E10 2 DETRYTYLATION/BI
E11 31469 DETS/BI
E12 2 DETS4/BI

=> s e3-e6

963 DETRUSOR/BI
1 DETRUSORECTOMY/BI
16 DETRUSORS/BI
4 DETRUSSOR/BI
L14 966 (DETRUSOR/BI OR DETRUSORECTOMY/BI OR DETRUSORS/BI OR DETRUSSOR/B
I)

=> s l14 and l10

L15 1 L14 AND L10

=> d l15 all

L15 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN 2001:467132 CAPLUS
DN 136:116664

TI Augmentation of nitric oxide to treat **detrusor-external**
sphincter dyssynergia in spinal cord injury
AU Mamas, M. A.; Reynard, J. M.; Brading, A. F.
CS Nuffield Department of Medicine, John Radcliffe Hospital, Oxford, UK
SO Lancet (2001), 357(9272), 1964-1967
CODEN: LANCAO; ISSN: 0140-6736
PB Lancet Ltd.
DT Journal
LA English
CC 14-10 (Mammalian Pathological Biochemistry)
Section cross-reference(s): 1
AB **Detrusor-external sphincter dyssynergia (DSD)** is a common cause
of bladder outlet obstruction in men with spinal cord injuries, which if
left untreated leads ultimately to renal failure. External sphincterotomy
is currently the main treatment for DSD. However, obstruction persists in
a substantial proportion of cases after this procedure. There is no
effective drug treatment for DSD. Nitric oxide is an inhibitory
neurotransmitter synthesized by nitric oxide synthase. Both animal and
human studies suggest that nitric oxide mediates urethral sphincter
relaxation. Nitric-oxide-synthase staining neurons have been identified
in very high d. in the urethral sphincters of a variety of animals and in
human beings. Relaxation of the urethral sphincter is abolished by
inhibitors of nitric oxide synthase and enhanced by nitric oxide donors.
Mice with targeted deletion of the gene, for neuronal nitric oxide have
urethral sphincters that do not relax in response to elec. stimulation.
We hypothesize that augmentation of external sphincter nitric oxide could
be an effective pharmacol. treatment for DSD. Currently available nitric
oxide donors such as glyceryl trinitrate or isosorbide mononitrate could
be used to deliver nitric oxide to the urethral sphincter. The variable
pharmacokinetics of these drugs combined with different modes of delivery

(sublingual, buccal, or oral) could be used to achieve both short-term and long-term increases in concns. of sphincter nitric oxide, thereby resulting in either acute or chronic lowering of urethral pressure. The safety and efficacy of this potential treatment for DSD needs to be established in clin. trials of men with spinal cord injures with DSD.

ST NO bladder outlet obstruction spinal cord injury

IT Spinal cord
 (injury; augmentation of nitric oxide to treat **detrusor**
 -external sphincter dyssynergia in spinal cord injury)

IT Bladder
 (obstruction; augmentation of nitric oxide to treat **detrusor**
 -external sphincter dyssynergia in spinal cord injury)

IT 10102-43-9, Nitric oxide, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (augmentation of nitric oxide to treat **detrusor**-external
 sphincter dyssynergia in spinal cord injury)

IT 55-63-0, Glyceryl trinitrate 16051-77-7, Isosorbide mononitrate
 RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (augmentation of nitric oxide to treat **detrusor**-external
 sphincter dyssynergia in spinal cord injury)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD

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(1) Bennett, B; J Urol 1995, V153, P2004 MEDLINE
 (2) Burnett, A; Nat Med 1997, V3, P571 CAPLUS
 (3) Catz, A; Spinal Cord 1997, V35, P48 MEDLINE
 (4) Dykstra, D; J Urol 1987, V138, P1155 MEDLINE
 (5) Ehren, I; Urology 1994, V44, P683 MEDLINE
 (6) Fontaine, E; J Urol 1996, V155, P277 MEDLINE
 (7) Fraser, M; J Urol 1998, V159, P23
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 (9) Ho, K; J Urol 1999, V161, P40
 (10) Kim, Y; J Urol 1998, V159, P493 MEDLINE
 (11) Perkash, I; J Spinal Cord Med 1995, V18, P236 MEDLINE
 (12) Persson, K; Eur J Pharmacol 1994, V268, P159 CAPLUS
 (13) Ross, J; J Urol 1958, V79, P742 MEDLINE
 (14) Smet, P; Neuroscience 1996, V71, P337 CAPLUS
 (15) Sutherland, R; J Urol 1997, V157, P1109 CAPLUS
 (16) Thyberg, M; Paraplegia 1994, V32, P308 MEDLINE
 (17) Webb, D; Am J Cardiol 1999, V83, P21C CAPLUS
 (18) Wei, J; Am J Cardiol 1981, V48, P778 CAPLUS
 (19) Wein, A; J Urol 1998, V160, P961 MEDLINE
 (20) Werkstrom, V; Br J Pharmacol 1995, V116, P1599 MEDLINE

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 L16 38 L14 AND L11

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(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

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| L1 | 51 S INDOMETHACIN |
| L2 | 75 S NAPROXEN |
| L3 | 6 S NIMESULIDE |
| L4 | 13 S NITROGLYCERIN |
| L5 | 443 S NITRIC OXIDE |

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

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| E MICTURITION |
| L6 861 S E3-E6 |

E BLADDER
L7 24458 S E3
E INCONTINENCE
L8 2013 S E3-E7
E URINARY
L9 107957 S E3
L10 6048 S L4
L11 76683 S L5
L12 1 S L6 AND L10
L13 27 S L6 AND L11
E DETRUSOR
L14 966 S E3-E6
L15 1 S L14 AND L10
L16 38 S L14 AND L11

=> s l16 not l13
L17 31 L16 NOT L13

=> d l17 10-31

L17 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 2000:92936 CAPLUS
DN 132:249535
TI Up-regulation of endothelin (ETA and ETB) receptors and down-regulation of nitric oxide synthase in the **detrusor** of a rabbit model of partial bladder outlet obstruction
AU Khan, M. A.; Dashwood, M. R.; Thompson, C. S.; Mumtaz, F. H.; Mkhailidis, D. P.; Morgan, R. J.
CS Department of Urology, Royal Free Hospital, London, NW3 2QG, UK
SO Urological Research (1999), 27(6), 445-453
CODEN: URLRA5; ISSN: 0300-5623
PB Springer-Verlag
DT Journal
LA English
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1999:722933 CAPLUS
DN 131:332126
TI Muscle-derived cell mediated gene delivery for treating muscle- and bone-related injury or dysfunction
IN Chancellor, Michael B.; Huard, Johnny
PA University of Pittsburgh, USA
SO PCT Int. Appl., 140 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| PI WO 9956785 | A2 | 19991111 | WO 1999-US9451 | 19990430 |
| WO 9956785 | A3 | 20010419 | | |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |

CA 2330660 AA 19991111 CA 1999-2330660 19990430
AU 9937757 A1 19991123 AU 1999-37757 19990430
EP 1113807 A2 20010711 EP 1999-920202 19990430
R: AT, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
PRAI US 1998-83917P P 19980501
WO 1999-US9451 W 19990430

L17 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1999:496321 CAPLUS
DN 131:298249
TI Alterations in the nitric oxide synthase binding sites and non-adrenergic, non-cholinergic mediated smooth muscle relaxation in the diabetic rabbit bladder outlet: possible relevance to the pathogenesis of diabetic cystopathy
AU Mumtaz, F. H.; Sullivan, M. E.; Thompson, C. S.; Dashwood, M. R.; Naseem, K. M.; Bruckdorfer, K. R.; Mikhailidis, D. P.; Morgan, R. J.
CS Departments of Urology, Chemical Pathology and Human Metabolism, Physiology and Biochemistry, London, N3 1PA, UK
SO Journal of Urology (Baltimore) (1999), 162(2), 558-566
CODEN: JOURAA; ISSN: 0022-5347
PB Lippincott Williams & Wilkins
DT Journal
LA English
RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1998:757713 CAPLUS
DN 130:178468
TI Involvement of nitric oxide in the potentiation of neurogenic contraction by manganese and nickel ions in mouse urinary bladder
AU Liu, S.-H.; Lin-Shiau, S.-Y.
CS No. 1, College of Medicine, Institute of Toxicology, National Taiwan University, Jen-Ai Road, 1st section, Taipei, 10018, Taiwan
SO Naunyn-Schmiedeberg's Archives of Pharmacology (1998), 358(6), 678-681
CODEN: NSAPCC; ISSN: 0028-1298
PB Springer-Verlag
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1998:708570 CAPLUS
DN 130:192162
TI Inhibitory innervation of the guinea-pig urethra; roles of CO, NO and VIP
AU Werkstrom, Viktoria; Alm, Per; Persson, Katarina; Andersson, Karl-Erik
CS Department of Clinical Pharmacology, Lund University Hospital, Lund, S-221 85, Swed.
SO Journal of the Autonomic Nervous System (1998), 74(1), 33-42
CODEN: JASYDS; ISSN: 0165-1838
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1998:124536 CAPLUS
DN 128:239751
TI Nitrergic and cholinergic innervation of the rat lower urinary tract after pelvic ganglionectomy

AU Persson, Katarina; Alm, Per; Uvelius, Bengt; Andersson, Karl-Erik
CS Dep. Clinical Pharmacol., Lund Univ. Hosp., Lund, S-221 85, Swed.
SO American Journal of Physiology (1998), 274(2, Pt. 2), R389-R397
CODEN: AJPHAP; ISSN: 0002-9513
PB American Physiological Society
DT Journal
LA English

L17 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1997:753981 CAPLUS
DN 128:113371
TI Enhancement by nitric oxide of neurogenic contraction in the mouse urinary bladder
AU Liu, S.-H.; Lin-Shiau, Shoei-Yn
CS No. 1, College of Medicine, Institute of Toxicology, National Taiwan University, Jen-Ai Road, 1st section, Taipei, 10018, Taiwan
SO Naunyn-Schmiedeberg's Archives of Pharmacology (1997), 356(6), 850-852
CODEN: NSAPCC; ISSN: 0028-1298
PB Springer-Verlag
DT Journal
LA English

L17 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1996:447425 CAPLUS
DN 125:105692
TI Effects of nitric oxide on **detrusor** relaxation
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl
CS College Medicine, Yonsei University, Seoul, S. Korea
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093
CODEN: JOURAA; ISSN: 0022-5347
PB Williams & Wilkins
DT Journal
LA English

L17 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1996:145475 CAPLUS
DN 124:221272
TI Distribution of nitric oxide synthase-immunoreactive nerves and identification of the cellular targets of nitric oxide in guinea pig and human urinary bladder by cGMP immunohistochemistry
AU Smet, P. J.; Jonavicius, J.; Marshall, V. R.; De Vente, J.
CS Centre for Neuroscience, Flinders Univ. of South Australia, Adelaide, 6200 MD, Australia
SO Neuroscience (Oxford) (1996), 71(2), 337-48
CODEN: NRSCDN; ISSN: 0306-4522
PB Elsevier
DT Journal
LA English

L17 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1996:100443 CAPLUS
DN 124:194705
TI Nitric oxide synthase-immunoreactive, adrenergic, cholinergic, and peptidergic nerves of the female rat urinary tract: a comparative study
AU Alm, P.; Zygmunt, P.K.E.; Iselin, C.; Larsson, B.; Uvelius, B.; Werner, S.; Andersson, K.-E.
CS Department of Pathology, Lund University Hospital, Lund, S-221 85, Swed.
SO Journal of the Autonomic Nervous System (1995), 56(1+2), 105-14
CODEN: JASYDS; ISSN: 0165-1838
PB Elsevier
DT Journal
LA English

L17 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1995:706430 CAPLUS
DN 123:247354
TI The L-arginine:nitric oxide pathway in pig lower urinary tract: Nitric oxide synthase immunohistochemistry, NADPH diaphorase activity and functional effects
AU Persson, K.; Alm, P.; Johansson, K.; Larsson, B.; Andersson, K. -E.
CS Departments Clinical Pharmacology, Lund University, Lund, Swed.
SO Portland Press Proceedings (1994), 8(Biology of Nitric Oxide, 3), 413-17
CODEN: POPPEF; ISSN: 0966-4068
PB Portland Press
DT Journal
LA English

L17 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1995:574453 CAPLUS
DN 123:133475
TI Co-existence of nitrergic, peptidergic and acetylcholine esterase-positive nerves in the pig lower urinary tract
AU Persson, Katarina; Alm, Per; Johansson, Kjell; Larsson, Bengt; Andersson, Karl-Erik
CS Department of Clinical Pharmacology, University of Lund, Lund, S-221 85, Swed.
SO Journal of the Autonomic Nervous System (1995), 52(2+3), 225-36
CODEN: JASYDS; ISSN: 0165-1838
DT Journal
LA English

L17 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1995:341865 CAPLUS
DN 122:123675
TI NADPH diaphorase and nitric oxide synthase are expressed by the majority of intramural neurons in the neonatal guinea pig urinary bladder
AU Saffrey, M. J.; Hassall, C. J. S.; Moules, E. W.; Burnstock, G.
CS Department of Anatomy and Development Biology, University College, London, UK
SO Journal of Anatomy (1994), 185(3), 487-95
CODEN: JOANAY; ISSN: 0021-8782
DT Journal
LA English

L17 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1995:303909 CAPLUS
DN 122:72511
TI Evidence for the presence of both pre- and postjunctional P2-purinoceptor subtypes in human isolated urinary bladder
AU Palea, S.; Pietra, C.; Trist, D. G.; Artibani, W.; Calpista, A.; Corsi, M.
CS Dep. Pharmacol., Glaxo Res. Lab., Verona, 37135, Italy
SO British Journal of Pharmacology (1995), 114(1), 35-40
CODEN: BJPCBM; ISSN: 0007-1188
PB Stockton
DT Journal
LA English

L17 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1994:500447 CAPLUS
DN 121:100447
TI Non-adrenergic, non-cholinergic relaxation and levels of cyclic nucleotides in rabbit lower urinary tract
AU Persson, Katarina; Andersson, Karl-Erik
CS Department of Clinical Pharmacology, Lund University Hospital, Lund, S-221

85, Swed.

SO European Journal of Pharmacology, Molecular Pharmacology Section (1994),
268(2), 159-68
CODEN: EJPPE; ISSN: 0922-4106

DT Journal

LA English

L17 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1994:319894 CAPLUS
DN 120:319894
TI Distribution of NADPH-diaphorase-positive nerves supplying the human urinary bladder
AU Smet, Peter J.; Edyvane, Katherine A.; Jonavicius, Jarmila; Marshall, Villis R.
CS Div. Surg., Repatriation Gen. Hosp., Adelaide, 5041, Australia
SO Journal of the Autonomic Nervous System (1994), 47(1-2), 109-13
CODEN: JASYDS; ISSN: 0165-1838

DT Journal

LA English

L17 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1994:28213 CAPLUS
DN 120:28213
TI NADPH-diaphorase and NANC relaxations are correlated in the sheep urinary tract
AU Triguero, Domingo; Prieto, Dolores; Garcia-Pascual, Angeles
CS Vet. Sch., Complutense Univ., Madrid, 28040, Spain
SO Neuroscience Letters (1993), 163(1), 93-6
CODEN: NELED5; ISSN: 0304-3940

DT Journal

LA English

L17 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1993:667246 CAPLUS
DN 119:267246
TI Nitric oxide synthase in pig lower urinary tract: Immunohistochemistry, NADPH diaphorase histochemistry and functional effects
AU Persson, Katarina; Alm, Per; Johansson, Kjell; Larsson, Bengt; Andersson, Karl Erik
CS Dep. Clin. Pharmacol., Lund Univ., Lund, Swed.
SO British Journal of Pharmacology (1993), 110(2), 521-30
CODEN: BJPCBM; ISSN: 0007-1188

DT Journal

LA English

L17 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1993:486878 CAPLUS
DN 119:86878
TI Nitric oxide and nonadrenergic, noncholinergic nerve-mediated relaxation of isolated pig and rabbit urethral and pig trigonal smooth muscle
AU Persson, K.; Garcia-Pascual, A.; Forman, A.; Toettrup, A.; Andersson, K. E.
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, Swed.
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,
Volume 1, 312-16. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.
CODEN: 59AFA7

DT Conference

LA English

L17 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1993:252196 CAPLUS

DN 118:252196
TI Partial mediation by nitric oxide of the relaxation of human isolated detrusor strips in response to electrical field stimulation
AU James, M. J.; Birmingham, A. T.; Hill, S. J.
CS Med. Sch., Univ. Nottingham, Nottingham, NG7 2UH, UK
SO British Journal of Clinical Pharmacology (1993), 35(4), 366-72
CODEN: BCPHBM; ISSN: 0306-5251
DT Journal
LA English

L17 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1992:445429 CAPLUS
DN 117:45429
TI Nitric oxide and relaxation of pig lower urinary tract
AU Persson, Katarina; Andersson, Karl Erik
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.
SO British Journal of Pharmacology (1992), 106(2), 416-22
CODEN: BJPCBM; ISSN: 0007-1188
DT Journal
LA English

L17 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1992:77163 CAPLUS
DN 116:77163
TI Inhibition of the arginine/nitric oxide pathway causes bladder hyperactivity in the rat
AU Persson, K.; Igawa, Y.; Mattiasson, A.; Andersson, K. E.
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.
SO Acta Physiologica Scandinavica (1992), 144(1), 107-8
CODEN: APSCAX; ISSN: 0001-6772
DT Journal
LA English

=> d 117 31 all

L17 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1992:77163 CAPLUS
DN 116:77163
TI Inhibition of the arginine/nitric oxide pathway causes bladder hyperactivity in the rat
AU Persson, K.; Igawa, Y.; Mattiasson, A.; Andersson, K. E.
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.
SO Acta Physiologica Scandinavica (1992), 144(1), 107-8
CODEN: APSCAX; ISSN: 0001-6772
DT Journal
LA English
CC 2-10 (Mammalian Hormones)
Section cross-reference(s): 14
AB The present expts. demonstrate that inhibition of the L-arginine/nitric oxide pathway leads to bladder hyperactivity and decreased bladder capacity. This suggests that continuous activity in this pathway is one of the factors keeping the bladder relaxed during filling. The NANC-mediated relaxant response to elec. stimulation found previously in vitro in the trigone and the urethra of several species, but not in the detrusor muscle, may reflect the localization of such activity, and lends support to the view that bladder hyperactivity (unstable detrusor contractions) may be initiated from the bladder outlet region.
ST bladder hyperactivity arginine nitric oxide control
IT Bladder
(disease, hyperactivity, arginine/nitric oxide pathway in pathophysiol.

of)

IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
(arginine pathway, in control of bladder hyperactivity, pathophysiol.
in relation to)

IT 74-79-3, L-Arginine, biological studies
RL: BIOL (Biological study)
(nitric oxide pathway, in control of bladder hyperactivity,
pathophysiol. in relation to)

=> d 117 30 all

L17 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1992:445429 CAPLUS
DN 117:45429
TI Nitric oxide and relaxation of pig lower urinary tract
AU Persson, Katarina; Andersson, Karl Erik
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.
SO British Journal of Pharmacology (1992), 106(2), 416-22
CODEN: BJPCBM; ISSN: 0007-1188
DT Journal
LA English
CC 13-6 (Mammalian Biochemistry)
AB The authors studied the non-adrenergic, non-cholinergic (NANC) nerve-mediated relaxation induced by elec. stimulation in pig isolated lower urinary tract smooth muscle, and the possible involvement of the L-arginine (L-ARG)/nitric oxide (NO) pathway in this response. Trigonal strips, precontracted by noradrenaline (NA), carbachol, or endothelin-1 (ET-1), relaxed frequency-dependently in response to elec. stimulation. Max. relaxation was obtained at 6-8 Hz, and amounted to 56, 77, and 62% of the agonist-induced tension in prepns. contracted by NA, carbachol, or ET-1, resp. Exposure to NG-nitro-L-arginine (L-NOARG; 10⁻⁷-10⁻⁵ M) concn.-dependently reduced the relaxant response in prepns. contracted by NA. L-NOARG (10⁻⁶ M) reduced the maximal response to 51% of control. L-NOARG (10⁻⁵ M) abolished all relaxation, and unmasked a contractile component; D-NOARG had no effect. Also in trigonal prepns., where the tension had been raised by carbachol or ET-1, L-NOARG (10⁻⁵ M) markedly reduced relaxations evoked by elec. stimulation. In trigonal prepns. contracted by NA, maximal relaxation was increased after pretreatment with L-ARG (10⁻³ M), and the inhibitory effect of L-NOARG (10⁻⁶ M) was prevented. Incubation of the trigonal strips with methylene blue had no effect on relaxations elicited at frequencies <6 Hz, but a small inhibition was obsd. at higher frequencies. Administration of NO (present in acidified soln. of NaNO₂) induced concn.-dependent relaxations in trigonal prepns. contracted by NA, carbachol, or ET-1. L-NOARG (10⁻⁵ M) and L-ARG (10⁻³ M) had no effect on these relaxations. However, methylene blue (10⁻⁵ M) shifted the concn.-response curve for NO to the right. NANC-relaxation and NO-induced relaxation of trigonal prepns. were both inhibited by oxyHb (10⁻⁵ M) and pyrogallol (10⁻⁴ M). In urethral prepns. precontracted by NA, elec. stimulation caused frequency-dependent relaxations. A max. relaxation of 73% was obtained at 10 Hz. Also in the urethra, NANC-relaxation was blocked by L-NOARG (10⁻⁵ M), and a contractile response generally appeared. **Detrusor** strips treated with .alpha.-.beta. methylene ATP (10⁻⁵ M) and atropine (10⁻⁶ M), and then contracted by ET-1, showed relaxations (19% of the induced tension) in response to elec. field stimulation (2-20 Hz) only when the tension was high. No response at all, or small contractions, were found in response to elec. stimulation in K⁺ (35 mM)-contracted **detrusor** strips. **Detrusor** prepns. contracted by carbachol were concn.-dependently relaxed by exogenously administered NO, SIN-1 (NO-donor), and isoprenaline, whereas vasoactive intestinal polypeptide

had minor effects. NO and SIN-1 induced maximal relaxations of 63 and 70%, resp., of the tension induced by carbachol. Isoprenaline produced an almost complete relaxation (96%). Thus, NANC-nerve mediated relaxation, involving the L-ARG/NO pathway, can be demonstrated consistently in the pig trigonal and urethral, but not in **detrusor** smooth muscle.

ST nitric oxide urinary tract muscle
IT Urethra
(relaxation of smooth muscle of, nonadrenergic-noncholinergic neurotransmission-induced, nitric oxide in)
IT Neuromuscular transmission
(nonadrenergic-noncholinergic, urinary tract smooth muscle relaxation induction by, nitric oxide in)
IT Bladder
(trigone, relaxation of smooth muscle of, nonadrenergic-noncholinergic neurotransmission-induced, nitric oxide in)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
(in nonadrenergic-noncholinergic neurotransmission-induced relaxation of urinary tract smooth muscle)

=> d 117 29 all

L17 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1993:252196 CAPLUS
DN 118:252196
TI Partial mediation by nitric oxide of the relaxation of human isolated **detrusor** strips in response to electrical field stimulation
AU James, M. J.; Birmingham, A. T.; Hill, S. J.
CS Med. Sch., Univ. Nottingham, Nottingham, NG7 2UH, UK
SO British Journal of Clinical Pharmacology (1993), 35(4), 366-72
CODEN: BCPHBM; ISSN: 0306-5251
DT Journal
LA English
CC 13-6 (Mammalian Biochemistry)
AB A method for reproducing relaxation of human isolated **detrusor** smooth muscle in vitro in response to elec. field stimulation is described. The parameters of stimulation assocd. with relaxation were those which would be expected to give a largely nerve-mediated response: the relaxations were not reduced by tetrodotoxin (3 .times. 10⁻⁷ M) and were therefore not dependent on voltage sensitive sodium channels. The relaxations were decreased (mean 74.1%) by nitro L-arginine (NOARG, 10⁻⁵ M). Methylene blue (10⁻⁵ M), an inhibitor of sol. guanylate cyclase, abolished the relaxations. These results indicate that there may be a relaxation mechanism in the human bladder which is at least partly mediated via the prodn. of nitric oxide.
ST nitric oxide **detrusor** muscle bladder relaxation
IT Bladder
(relaxation in, nitric oxide mediation of)
IT Bladder
(**detrusor** muscle, nitric oxide mediation of relaxation of, in human bladder)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
(role in human bladder relaxation)

=> d 117 28 all

L17 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1993:486878 CAPLUS
DN 119:86878

TI Nitric oxide and nonadrenergic, noncholinergic nerve-mediated relaxation of isolated pig and rabbit urethral and pig trigonal smooth muscle
AU Persson, K.; Garcia-Pascual, A.; Forman, A.; Toettrup, A.; Andersson, K. E.
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, Swed.
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991, Volume 1, 312-16. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.
CODEN: 59AFA7
DT Conference
LA English
CC 2-8 (Mammalian Hormones)
AB The present study shows that nonadrenergic-noncholinergic-mediated relaxation, involving the L-arginine:NO pathway, can be demonstrated in the trigonal and urethral, but not in the **detrusor** smooth muscle. The importance of this pathway for lower-urinary-tract physiol. and pathophysiol. remains to be established.
ST urinary tract nonadrenergic noncholinergic nitric oxide
IT Urinary tract
 (nonadrenergic-noncholinergic nerve-mediated relaxation of smooth muscle of, nitric oxide mediation of)
IT Nerve
 (nonadrenergic-noncholinergic, urinary tract smooth muscle relaxation by stimulation of, nitric oxide mediation of)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
 (urinary tract smooth muscle relaxation response to nonadrenergic-noncholinergic nerve stimulation mediation by)

=> d 117 17 all

L17 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1996:447425 CAPLUS
DN 125:105692
TI Effects of nitric oxide on **detrusor** relaxation
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl
CS College Medicine, Yonsei University, Seoul, S. Korea
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093
CODEN: JOURAA; ISSN: 0022-5347
PB Williams & Wilkins
DT Journal
LA English
CC 2-8 (Mammalian Hormones)
AB This study was designed to characterize the effect of NO, exploiting the photo-induced adequate NP (PIANO) system, on rat **detrusor** relaxation by isometric tension recording and measuring changes in cGMP content. Exposure to UV light was used (1-60 s) to evoke PIANO in the presence of streptozotocin, an NO carrier, and N.omega.-nitro-L-arginine (L-NOARG), an NO₂-carrier. During relaxation the cGMP content was measured by RIA. Rat **detrusor** strips were reversibly relaxed upon NO generation via PIANO. Pyrogallol, an O₂ generator, significantly diminished PIANO-mediated relaxation. During PIANO-mediated relaxation, the tissue level of cGMP significantly increased over that of the control. Furthermore, methylene blue, a guanylate cyclase inhibitor, significantly inhibited both the relaxation and the increase of cGMP. Thus, the rat **detrusor** muscle is capable of responding to NO, and these findings might lead to a treatment for bladder instability and **detrusor** hyperreflexia by the use of intravesical instillation of NO donors.
ST nitric oxide **detrusor** muscle relaxation; bladder relaxation cGMP
nitric oxide
IT Bladder

(**detrusor** muscle, effects of nitric oxide on **detrusor**
muscle relaxation and cGMP)

IT 7782-44-7, Oxygen, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effects of nitric oxide and oxygen on **detrusor** muscle relaxation and cGMP)

IT 10102-43-9, Nitric oxide, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effects of nitric oxide on **detrusor** muscle relaxation and cGMP)

IT 7665-99-8, CGMP
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(effects of nitric oxide on **detrusor** muscle relaxation and cGMP)

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN
L2 75 S NAPROXEN
L3 6 S NIMESULIDE
L4 13 S NITROGLYCERIN
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION
L6 861 S E3-E6
E BLADDER
L7 24458 S E3
E INCONTINENCE
L8 2013 S E3-E7
E URINARY
L9 107957 S E3
L10 6048 S L4
L11 76683 S L5
L12 1 S L6 AND L10
L13 27 S L6 AND L11
E DETRUSOR
L14 966 S E3-E6
L15 1 S L14 AND L10
L16 38 S L14 AND L11
L17 31 S L16 NOT L13

=> s l8 and l10

L18 10 L8 AND L10

=> d l18 4-10

L18 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 2001:5914 CAPLUS

DN 135:102290

TI Double-blind manometric assessment of two topical glyceryl trinitrate formulations in patients with chronic anal fissures

AU Bassotti, G.; Clementi, M.; Ceccarelli, F.; Pelli, M. A.

CS Department of Clinical and Experimental Medicine, University of Perugia
School of Medicine, Perugia, 06100, Italy

SO Digestive and Liver Disease (2000), 32(8), 699-702

CODEN: DLDIFK

PB Pacini Editore

DT Journal

LA English

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1999:465629 CAPLUS

DN 131:125392

TI A comparison of injections of botulinum toxin and topical nitroglycerin ointment for the treatment of chronic anal fissure

AU Brisinda, Giuseppe; Maria, Giorgio; Bentivoglio, Anna Rita; Cassetta, Emanuele; Gui, Daniele; Albanese, Alberto

CS Institute of Surgery, Catholic University of Rome, Rome, 00168, Italy

SO New England Journal of Medicine (1999), 341(2), 65-69

CODEN: NEJMAG; ISSN: 0028-4793

PB Massachusetts Medical Society

DT Journal

LA English

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1997:499098 CAPLUS

DN 127:156731

TI Treatment of urinary **incontinence** with nitric oxide synthase substrates and/or nitric oxide donors

IN Garfield, Robert E.; Chwalisz, Kristof

PA Schering A.-G., Germany; Board of Regents the University of Texas System

SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|--|----------|-----------------|----------|
| PI | WO 9725984 | A1 | 19970724 | WO 1997-US795 | 19970121 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | US 5789442 | A | 19980804 | US 1996-588586 | 19960118 |
| | ZA 9700458 | A | 19980714 | ZA 1997-458 | 19970120 |
| | AU 9717031 | A1 | 19970811 | AU 1997-17031 | 19970121 |
| | AU 721998 | B2 | 20000720 | | |
| | EP 874627 | A1 | 19981104 | EP 1997-902990 | 19970121 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | |
| | CN 1208346 | A | 19990217 | CN 1997-191745 | 19970121 |
| | BR 9707026 | A | 19990720 | BR 1997-7026 | 19970121 |
| | JP 11512748 | T2 | 19991102 | JP 1997-526227 | 19970121 |
| | US 6028106 | A | 20000222 | US 1997-960365 | 19971029 |
| | NO 9803288 | A | 19980917 | NO 1998-3288 | 19980716 |
| PRAI | US 1996-588586 | A | 19960118 | | |
| | WO 1997-US795 | W | 19970121 | | |

L18 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS
 AN 1995:793005 CAPLUS
 DN 123:188641
 TI Nitric oxide synthase inhibitors for the treatment of male sexual dysfunctions
 IN Snyder, Solomon H.; Burnett, Arthur L.; Lowenstein, Charles J.; Bredt, David S.; Chang, Thomas S. K.
 PA The Johns Hopkins University, USA
 SO U.S., 7 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| PI US 5439938 | A | 19950808 | US 1993-43821 | 19930407 |

L18 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS
 AN 1995:723143 CAPLUS
 DN 123:102794
 TI Pharmaceutical compositions and use thereof for treatment of neurological diseases and etiologically related symptomatology.
 IN Shapiro, Howard K.
 PA USA
 SO PCT Int. Appl., 155 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 3

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| PI WO 9501096 | A1 | 19950112 | WO 1994-US7277 | 19940628 |
| W: AU, CA, JP | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 5668117 | A | 19970916 | US 1993-62201 | 19930629 |
| AU 9472144 | A1 | 19950124 | AU 1994-72144 | 19940628 |
| AU 692454 | B2 | 19980611 | | |
| EP 707446 | A1 | 19960424 | EP 1994-921405 | 19940628 |
| R: DE, FR, GB, IT | | | | |
| JP 08512055 | T2 | 19961217 | JP 1994-503597 | 19940628 |
| PRAI US 1993-62201 | | 19930629 | | |
| US 1991-660561 | | 19910222 | | |
| US 1993-26617 | | 19930223 | | |
| WO 1994-US7277 | | 19940628 | | |

L18 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS
 AN 1982:193181 CAPLUS
 DN 96:193181
 TI Toxicological studies on nitroglycerin (NK-843). V. Intravenous subacute toxicity in dog
 AU Oketani, Yoneshiro; Mitsuzono, Toji; Ichikawa, Koichi; Itono, Yuichi; Gojo, Takao; Gofuku, Masaya; Konoha, Noriyasu
 CS New Drug Dev. Res. Cent., Inc., Iwamizawa, Japan
 SO Iyakuhin Kenkyu (1982), 13(1), 125-44
 CODEN: IYKEDH
 DT Journal
 LA Japanese

L18 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS
 AN 1982:115734 CAPLUS
 DN 96:115734
 TI Toxicological studies on nitroglycerin (NK-843). 4. Acute toxicity in

dogs
AU Oketani, Yoneshiro; Mitsuzono, Toji; Ichikawa, Koichi; Itono, Yuichi;
Gojo, Takao; Gofuku, Masaya; Konoha, Noriyasu
CS New Drug Dev. Res. Cent. Inc., Iwamizawa, 069-03, Japan
SO Oyo Yakuri (1981), 22(5), 629-32
CODEN: OYYAA2; ISSN: 0369-8033
DT Journal
LA Japanese

=> s 18 and l11
L19 21 L8 AND L11

=> s 119 not 118
L20 16 L19 NOT L18

=> d 120 6-16

L20 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 2001:816459 CAPLUS
DN 135:339302
TI Methods and compositions for enhancing cellular function through protection of tissue components
IN Frey, William H., II; Fawcett, John Randall; Thorne, Robert Gary; Chen, Xueqing
PA Healthpartners Research Foundation, USA
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 2001082932 | A2 | 20011108 | WO 2001-US13931 | 20010430 |
| | WO 2001082932 | A3 | 20020718 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 2002028786 | A1 | 20020307 | US 2001-844450 | 20010427 |
| PRAI | US 2000-200843P | P | 20000501 | | |
| | US 2000-230263P | P | 20000906 | | |
| | US 2000-233025P | P | 20000915 | | |
| | US 2000-233263P | P | 20000918 | | |
| OS | MARPAT | 135:339302 | | | |

L20 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 2001:511911 CAPLUS
DN 136:240865
TI Review article: the pharmacology of the internal anal sphincter and new treatments of ano-rectal disorders
AU Cook, T. A.; Brading, A. F.; Mortensen, N. J. McC.
CS University Department of Pharmacology and Department of Colorectal Surgery, John Radcliffe Hospital, Oxford, OX3 9 OU, UK
SO Alimentary Pharmacology and Therapeutics (2001), 15(7), 887-898
CODEN: APTHEN; ISSN: 0269-2813
PB Blackwell Science Ltd.

DT Journal; General Review

LA English

RE.CNT 101 THERE ARE 101 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 2001:31317 CAPLUS

DN 134:105849

TI Highly selective norepinephrine reuptake inhibitors and methods of using
the same

IN Wong, Erik H. F.; Ahmed, Saeeduddin; Marshall, Robert Clyde; McArthur,
Robert; Taylor, Duncan P.; Birgerson, Lars; Cetera, Pasquale

PA Pharmacia & Upjohn Company, USA

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|---|----------|-----------------|----------|
| PI WO 2001001973 | A2 | 20010111 | WO 2000-US17256 | 20000622 |
| WO 2001001973 | A3 | 20020117 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1196172 | A2 | 20020417 | EP 2000-941659 | 20000622 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | |
| BR 2000012136 | A | 20020611 | BR 2000-12136 | 20000622 |
| US 6465458 | B1 | 20021015 | US 2000-599213 | 20000622 |
| US 2002061910 | A1 | 20020523 | US 2001-20261 | 20011214 |
| NO 2001006406 | A | 20020219 | NO 2001-6406 | 20011228 |
| US 2002086864 | A1 | 20020704 | US 2002-37344 | 20020104 |
| US 2002128173 | A1 | 20020912 | US 2002-99334 | 20020104 |
| US 2002107249 | A1 | 20020808 | US 2002-55663 | 20020123 |
| PRAI US 1999-141968P | P | 19990701 | | |
| US 1999-144131P | P | 19990716 | | |
| US 1999-158256P | P | 19991006 | | |
| US 1999-170381P | P | 19991213 | | |
| US 2000-599213 | A3 | 20000622 | | |
| WO 2000-US17256 | W | 20000622 | | |

L20 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 2000:814310 CAPLUS

DN 133:359255

TI Nitrosated and nitrosylated potassium channel activators, compositions,
and methods of use

IN Garvey, David S.; Saenz De Tejada, Inigo

PA Nitromed, Inc., USA

SO PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

PI WO 2000067754 A1 20001116 WO 2000-US12957 20000512
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6417207 B1 20020709 US 2000-570727 20000512
US 2002143188 A1 20021003 US 2002-154916 20020528

PRAI US 1999-133888P P 19990512
US 2000-570727 A3 20000512

OS MARPAT 133:359255

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 1999:731703 CAPLUS

DN 132:202450

TI HCT-1026: Treatment of septic shock, treatment of urinary incontinence, treatment of osteoporosis, nitric oxide donor

AU Burgaud, J. L.; Benedini, F.; Robinson, E. M.; Del Soldato, P.

CS NicOx, Valbonne, 06560, Fr.

SO Drugs of the Future (1999), 24(8), 858-861

CODEN: DRFUD4; ISSN: 0377-8282

PB Prous Science

DT Journal; General Review

LA English

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 1999:722933 CAPLUS

DN 131:332126

TI Muscle-derived cell mediated gene delivery for treating muscle- and bone-related injury or dysfunction

IN Chancellor, Michael B.; Huard, Johnny

PA University of Pittsburgh, USA

SO PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

| | | | | |
|---------------|----|----------|----------------|----------|
| PI WO 9956785 | A2 | 19991111 | WO 1999-US9451 | 19990430 |
| WO 9956785 | A3 | 20010419 | | |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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|------------|----|----------|-----------------|----------|
| CA 2330660 | AA | 19991111 | CA 1999-2330660 | 19990430 |
|------------|----|----------|-----------------|----------|

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|------------|----|----------|---------------|----------|
| AU 9937757 | A1 | 19991123 | AU 1999-37757 | 19990430 |
|------------|----|----------|---------------|----------|

| | | | | |
|------------|----|----------|----------------|----------|
| EP 1113807 | A2 | 20010711 | EP 1999-920202 | 19990430 |
|------------|----|----------|----------------|----------|

R: AT, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRAI US 1998-83917P P 19980501
WO 1999-US9451 W 19990430

L20 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1999:596856 CAPLUS

DN 131:223509

TI Pharmaceuticals containing inhibitory nonadrenergic-noncholinergic nerve function activators

IN Omura, Shigeki; Matsunaga, Koichi; Mizuno, Noriko

PA Tokyo Tanabe Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| PI JP 11255668 | A2 | 19990921 | JP 1998-56812 | 19980309 |

L20 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 1998:479406 CAPLUS

DN 129:86054

TI Pharmaceutical composition for treating fecal **incontinence** and anal itch

IN Kamm, Michael Albert; Phillips, Robin Kenneth Stewart

PA UK

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------|----------|
| PI WO 9827971 | A1 | 19980702 | WO 1997-GB3525 | 19971223 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9853315 | A1 | 19980717 | AU 1998-53315 | 19971223 |
| AU 728889 | B2 | 20010118 | | |
| EP 946155 | A1 | 19991006 | EP 1997-950311 | 19971223 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI | | | | |
| JP 2001507020 | T2 | 20010529 | JP 1998-528550 | 19971223 |
| PRAI GB 1996-26739 | A | 19961223 | | |
| GB 1996-26750 | A | 19961223 | | |
| GB 1997-3309 | A | 19970218 | | |
| WO 1997-GB3525 | W | 19971223 | | |
| RE.CNT 9 | THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT | | | |

L20 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 1998:383264 CAPLUS

DN 129:104501

TI Oxytocin-induced stimulation and inhibition of bladder activity in normal, conscious rats-influence of nitric oxide synthase inhibition

AU Pandita, R. K.; Nylen, A.; Andersson, K. -E.

CS Department of Clinical Pharmacology, Lund University Hospital, Lund, Swed.

SO Neuroscience (Oxford) (1998), 85(4), 1113-1119

CODEN: NRSCDN; ISSN: 0306-4522
PB Elsevier Science Ltd.
DT Journal
LA English

L20 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1997:568140 CAPLUS
DN 127:215960
TI Novel penile neuronal nitric oxide synthase (RPNOS) and applications for diagnosis and treatment of urogenital disorders
IN Gonzalez-Cadavid, Nestor F.; Rajfer, Jacob
PA Gonzalez-Cadavid, Nestor F., USA; Rajfer, Jacob
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 9730066 | A1 | 19970821 | WO 1997-US1565 | 19970213 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
MR, NE, SN, TD, TG | | | | |
| AU 9718509 | A1 | 19970902 | AU 1997-18509 | 19970213 |
| PRAI US 1996-11707P | P | 19960215 | | |
| US 1996-17371P | P | 19960510 | | |
| US 1996-31550P | P | 19961203 | | |
| WO 1997-US1565 | W | 19970213 | | |

L20 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1993:509502 CAPLUS
DN 119:109502
TI Nitric oxide mediates nonadrenergic, noncholinergic relaxation of the smooth muscle sphincter of the urinary bladder
AU Thornbury, K. D.; Hollywood, M. A.; McHale, N. G.
CS Sch. Biomed. Sci., Queen's Univ., Belfast, BT9 7BL, UK
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,
Volume 1, 309-12. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.
CODEN: 59AFA7
DT Conference
LA English

=> d 120 16 all

L20 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1993:509502 CAPLUS
DN 119:109502
TI Nitric oxide mediates nonadrenergic, noncholinergic relaxation of the smooth muscle sphincter of the urinary bladder
AU Thornbury, K. D.; Hollywood, M. A.; McHale, N. G.
CS Sch. Biomed. Sci., Queen's Univ., Belfast, BT9 7BL, UK
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,
Volume 1, 309-12. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.
CODEN: 59AFA7

DT Conference
LA English
CC 2-8 (Mammalian Hormones)
AB The results of the present study demonstrate that nonadrenergic-noncholinergic (NANC) relaxation and after-contraction in the smooth muscle sphincter of the bladder depend on synthesis and release of NO or a closely related compd. The demonstration that relaxation of the internal sphincter is antagonized by the NO synthase inhibitor, L-NAME, provides an opportunity to assess the role of inhibitory NANC nerves in vivo, and may improve understanding of clin. conditions such as stress **incontinence**, urge **incontinence** and urinary retention.
ST bladder relaxation nonadrenergic noncholinergic nitric oxide
IT Bladder
 (nonadrenergic noncholinergic relaxation of, nitric oxide mediation of)
IT Nervous system
 (nonadrenergic-noncholinergic, bladder relaxation by, nitric oxide mediation of)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
 (nonadrenergic noncholinergic bladder relaxation mediation by)

=> s 19 and l11
L21 757 L9 AND L11

=> s 121 and l1
 12239 L1
L22 3 L21 AND L1

=> d 122 1-3

L22 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2002:665046 CAPLUS
DN 137:226422
TI Increased **urinary** nitrite excretion in primary enuresis: effects of indomethacin treatment on **urinary** and serum osmolality and electrolytes, **urinary** volumes and nitrite excretion
AU Al-Waili, N. S.
CS Dubai Specialized Medical Center and Medical Research Laboratories, Islamic Establishment for Education, Dubai, United Arab Emirates
SO BJU International (2002), 90(3), 294-301
CODEN: BJINFO; ISSN: 1464-4096
PB Blackwell Science Ltd.
DT Journal
LA English
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2002:658295 CAPLUS
DN 137:212221
TI Rat toxicologically relevant genes and use in microarrays to evaluate toxicity of toxic agents
IN Farris, Georgia; Hicken, Samuel H.; Farr, Spencer B.
PA Phase-1 Molecular Toxicology, Inc., USA
SO PCT Int. Appl., 388 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|-------|-----------------|-------|
| ----- | ----- | ----- | ----- | ----- |

PI WO 2002066682 A2 20020829 WO 2002-US2935 20020129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-264933P P 20010129
US 2001-308161P P 20010726

L22 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 1997:561656 CAPLUS
DN 127:214807
TI Pharmacological protection of NSAID-induced intestinal permeability in the rat: effect of tempo and metronidazole as potential free radical scavengers
AU Davies, Neal M.; Jamali, Fakhreddin
CS Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, T6G 2N8, Can.
SO Human & Experimental Toxicology (1997), 16(7), 345-349
CODEN: HETOEA; ISSN: 0960-3271
PB Stockton
DT Journal
LA English

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN
L2 75 S NAPROXEN
L3 6 S NIMESULIDE
L4 13 S NITROGLYCERIN
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION
L6 861 S E3-E6
E BLADDER
L7 24458 S E3
E INCONTINENCE
L8 2013 S E3-E7
E URINARY
L9 107957 S E3
L10 6048 S L4
L11 76683 S L5
L12 1 S L6 AND L10
L13 27 S L6 AND L11
E DETRUSOR
L14 966 S E3-E6
L15 1 S L14 AND L10
L16 38 S L14 AND L11
L17 31 S L16 NOT L13
L18 10 S L8 AND L10
L19 21 S L8 AND L11
L20 16 S L19 NOT L18

L21 757 S L9 AND L11
L22 3 S L21 AND L1

=> s 11
L23 12239 L1

=> s 12
L24 7053 L2

=> s 13
L25 553 L3

=> s 123 and 114
L26 17 L23 AND L14

=> d 126 7-17

L26 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1988:565184 CAPLUS
DN 109:165184
TI The contribution of sensory nerves to xylene-induced cystitis in rats
AU Maggi, C. A.; Abelli, L.; Giuliani, S.; Santicioli, P.; Geppetti, P.;
Somma, V.; Frilli, S.; Meli, A.
CS Pharmacol. Dep., A. Menarini Pharm., Florence, 50131, Italy
SO Neuroscience (Oxford) (1988), 26(2), 709-23
CODEN: NRSCDN; ISSN: 0306-4522
DT Journal
LA English

L26 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1986:564642 CAPLUS
DN 105:164642
TI Preferential antagonism of tiaramide to prostaglandin E2-induced
contraction in isolated rabbit **detrusor**
AU Nakanishi, Hironori; Yoshida, Hirohide; Shirasaka, Masayoshi; Ono,
Tomoyuki; Matsuoka, Isao; Nakahata, Norimichi
CS Dep. Pharmacol., Fukushima Med. Coll., Fukushima, 960, Japan
SO Fukushima J. Med. Sci. (1985), 31(2), 63-70
CODEN: FJMSAU; ISSN: 0016-2590
DT Journal
LA English

L26 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1984:563362 CAPLUS
DN 101:163362
TI Evidence for the involvement of arachidonic acid metabolites in
spontaneous and drug-induced contractions of rat urinary bladder
AU Maggi, Carlo Alberto; Evangelista, Stefano; Grimaldi, Guglielmo;
Santicioli, Paolo; Giolitti, Alessandro; Meli, Alberto
CS Pharmacol. Dep., Menarini Pharm., Florence, 50131, Italy
SO J. Pharmacol. Exp. Ther. (1984), 230(2), 500-13
CODEN: JPETAB; ISSN: 0022-3565
DT Journal
LA English

L26 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1983:516005 CAPLUS
DN 99:116005
TI Neurotransmission in activation of the contractile response in the human
urinary bladder
AU Nergaardh, Arne; Kinn, Anne Charlotte
CS Dep. Pediatr., Karolinska Hosp., Stockholm, S-104 01, Swed.

SO Scand. J. Urol. Nephrol. (1983), 17(2), 153-7
CODEN: SJUNAS; ISSN: 0036-5599
DT Journal
LA English

L26 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1981:41630 CAPLUS
DN 94:41630
TI **Detrusor** dynamics. II. Effect of prostaglandins and their synthesis inhibitor on stress-relaxation time course
AU Abdel-Rahman, M.; Coulombe, A.; Elhilali, M. M.
CS Dep. Urol. Biophys., Cent. Hosp. Univ., Sherbrooke, PQ, Can.
SO Invest. Urol. (1981), 18(4), 281-4
CODEN: INURAQ; ISSN: 0021-0005
DT Journal
LA English

L26 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1979:468451 CAPLUS
DN 91:68451
TI Inhibition of ATP-induced contraction in the guinea pig urinary bladder in vitro and in vivo
AU Sjogren, C.; Andersson, K. E.
CS Res. Lab., AB Leo, Helsingborg, Swed.
SO Acta Pharmacol. Toxicol. (1979), 44(3), 221-7
CODEN: APTOA6; ISSN: 0001-6683
DT Journal
LA English

L26 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1978:557176 CAPLUS
DN 89:157176
TI Purinergic innervation of the guinea-pig urinary bladder
AU Burnstock, G.; Cocks, T.; Crowe, R.; Kasakov, L.
CS Dep. Anat. Embryol., Univ. Coll., London, Engl.
SO Br. J. Pharmacol. (1978), 63(1), 125-38
CODEN: BJPCBM; ISSN: 0007-1188
DT Journal
LA English

L26 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1978:146643 CAPLUS
DN 88:146643
TI Interactions of calcium, prostaglandins and indomethacin on the smooth muscle of the bladder
AU Anderson, Gordon F.; Kohn, Kenneth I.
CS Dep. Pharmacol., Wayne State Univ. Sch. Med., Detroit, Mich., USA
SO Pharmacology (1978), 16(6), 306-13
CODEN: PHMGBN; ISSN: 0031-7012
DT Journal
LA English

L26 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1977:400558 CAPLUS
DN 87:558
TI Clinical and experimental studies on the action of prostaglandins and their synthesis inhibitors on **detrusor** muscle in vitro and in vivo
AU Bultitude, M. I.; Hills, N. H.; Shuttleworth, K. E. D.
CS Dep. Urol., St. Thomas's Hosp., London, Engl.
SO Br. J. Urol. (1976), 48(7), 631-7
CODEN: BJURAN

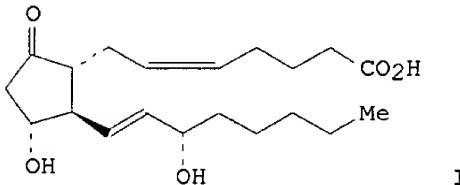
DT Journal
LA English

L26 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1976:554249 CAPLUS
DN 85:154249
TI Prostaglandins and tone in isolated strips of mammalian bladder
AU Hills, N. H.
CS Dep. Urol., St. Thomas' Hosp., London, Engl.
SO Br. J. Pharmacol. (1976), 57(3), 464P-465P
CODEN: BJPCBM
DT Journal
LA English

L26 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1976:440700 CAPLUS
DN 85:40700
TI Evidence for a role of prostaglandins in atropine-resistant transmission
in the mammalian urinary bladder
AU Johns, Anthony; Paton, David M.
CS Dep. Pharmacol., Univ. Alberta, Edmonton, Alberta, Can.
SO Prostaglandins (1976), 11(3), 595-7
CODEN: PRGLBA
DT Journal
LA English

=> d 126 14 all

L26 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1978:146643 CAPLUS
DN 88:146643
TI Interactions of calcium, prostaglandins and indomethacin on the smooth
muscle of the bladder
AU Anderson, Gordon F.; Kohn, Kenneth I.
CS Dep. Pharmacol., Wayne State Univ. Sch. Med., Detroit, Mich., USA
SO Pharmacology (1978), 16(6), 306-13
CODEN: PHMGBN; ISSN: 0031-7012
DT Journal
LA English
CC 2-5 (Hormone Pharmacology)
GI



I

AB The effects of PGE2 (I) [363-24-6], PGF2.alpha. [551-11-1] and
indomethacin (II) [53-86-1] were studied on isolated rabbit
detrusor smooth muscle strips in balanced salt soln. and in 80 mM
K⁺ depolarizing soln. The addn. of II to the smooth muscle prepns. at
0.1-1.0 .mu.M produced depression of spontaneous motility that was
partially antagonized by I or by elevating the extracellular Ca²⁺ level.
Alone, both I and Ca²⁺ caused a marked increase in motility, increasing
both frequency and amplitude. In low Ca²⁺, K⁺ depolarized bathing medium

with 0.1 mM EGTA added, I or PGF2. α . augmented Ca $^{2+}$ contractures both in velocity and amplitude, whereas either prostaglandin without Ca $^{2+}$ had not effect on the smooth muscle. II produced a noncompetitive antagonism of the Ca $^{2+}$ dose response curve in 80 mM K $^{+}$ depolarized preps. suggesting a direct effect on Ca $^{2+}$ flux. II also depressed both prostaglandin and Ca $^{2+}$ contractures in terms of velocity and magnitude, suggesting that it may act at Ca $^{2+}$ channels in addn. to its action on prostaglandin synthetase. These data support the work of others who suggest that prostaglandins may augment Ca $^{2+}$ permeability, acting at the Ca $^{2+}$ channel or as carriers for Ca $^{2+}$ across smooth muscle cell membrane.

ST calcium indomethacin prostaglandin bladder
IT Bladder
 (contraction of, calcium and indomethacin and prostaglandin interaction in)
IT 363-24-6 551-11-1
RL: BIOL (Biological study)
 (bladder response to, calcium and indomethacin interaction in)
IT 53-86-1
RL: BIOL (Biological study)
 (bladder response to, calcium and prostaglandins interaction in)
IT 7440-70-2, biological studies
RL: BIOL (Biological study)
 (bladder response to, indomethacin and prostaglandins interaction in)

=> s 124 and 114
L27 0 L24 AND L14

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN
L2 75 S NAPROXEN
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L4 13 S NITROGLYCERIN
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION
L6 861 S E3-E6
E BLADDER
L7 24458 S E3
E INCONTINENCE
L8 2013 S E3-E7
E URINARY
L9 107957 S E3
L10 6048 S L4
L11 76683 S L5
L12 1 S L6 AND L10
L13 27 S L6 AND L11
E DETRUSOR
L14 966 S E3-E6
L15 1 S L14 AND L10
L16 38 S L14 AND L11
L17 31 S L16 NOT L13
L18 10 S L8 AND L10
L19 21 S L8 AND L11
L20 16 S L19 NOT L18
L21 757 S L9 AND L11
L22 3 S L21 AND L1

L23 12239 S L1
L24 7053 S L2
L25 553 S L3
L26 17 S L23 AND L14
L27 0 S L24 AND L14

=> s 125 and l14
L28 0 L25 AND L14

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(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN
L2 75 S NAPROXEN
L3 6 S NIMESULIDE
L4 13 S NITROGLYCERIN
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION
L6 861 S E3-E6
E BLADDER
L7 24458 S E3
E INCONTINENCE
L8 2013 S E3-E7
E URINARY
L9 107957 S E3
L10 6048 S L4
L11 76683 S L5
L12 1 S L6 AND L10
L13 27 S L6 AND L11
E DETRUSOR
L14 966 S E3-E6
L15 1 S L14 AND L10
L16 38 S L14 AND L11
L17 31 S L16 NOT L13
L18 10 S L8 AND L10
L19 21 S L8 AND L11
L20 16 S L19 NOT L18
L21 757 S L9 AND L11
L22 3 S L21 AND L1
L23 12239 S L1
L24 7053 S L2
L25 553 S L3
L26 17 S L23 AND L14
L27 0 S L24 AND L14
L28 0 S L25 AND L14

=> s l8 and l24
L29 3 L8 AND L24

=> d 129 1-3

L29 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2001:167795 CAPLUS
DN 134:212737
TI Delayed-release oral pharmaceutical dosage forms
IN Ziegler, Iris; Bartholomaeus, Johannes
PA Gruenenthal G.m.b.H., Germany
SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 4

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|----------|
| PI | WO 2001015681 | A1 | 20010308 | WO 2000-EP7525 | 20000803 |
| | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | DE 19940944 | A1 | 20010315 | DE 1999-19940944 | 19990831 |
| | EP 1207867 | A1 | 20020529 | EP 2000-954585 | 20000803 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| | BR 2000013823 | A | 20020723 | BR 2000-13823 | 20000803 |
| | NO 2002000976 | A | 20020320 | NO 2002-976 | 20020227 |
| PRAI | DE 1999-19940944 | A | 19990831 | | |
| | WO 2000-EP7525 | W | 20000803 | | |

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS

AN 1995:980141 CAPLUS

DN 124:106940

TI The effects of an estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women: A pilot study

AU Blom, Marie W.; Sommers, De Clerk

CS Faculty Medicine, University Pretoria, Pretoria, 0001, S. Afr.

SO Current Therapeutic Research (1995), 56(10), 1100-4

CODEN: CTCEA9; ISSN: 0011-393X

PB Excerpta Medica

DT Journal

LA English

L29 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS

AN 1981:436699 CAPLUS

DN 95:36699

TI Toxicology of trimethyl- and triethyl phosphorothioates

AU Verschoyle, R. D.; Aldridge, W. N.; Cabral, J. R. P.

CS Toxicol. Unit, Med. Res. Coun. Lab., Carshalton/Surrey, Engl.

SO Dev. Toxicol. Environ. Sci. (1980), 8(Mech. Toxic. Hazard Eval.), 631-4

CODEN: DTESD7; ISSN: 0165-2214

DT Journal

LA English

=> d 129 2 all

L29 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS

AN 1995:980141 CAPLUS

DN 124:106940

TI The effects of an estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women: A pilot study

AU Blom, Marie W.; Sommers, De Clerk

CS Faculty Medicine, University Pretoria, Pretoria, 0001, S. Afr.
 SO Current Therapeutic Research (1995), 56(10), 1100-4
 CODEN: CTCEA9; ISSN: 0011-393X
 PB Excerpta Medica
 DT Journal
 LA English
 CC 2-4 (Mammalian Hormones)
 Section cross-reference(s): 63
 AB The aim of this study was to evaluate the effects of a transdermal estradiol delivery system, alone and in combination with naproxen, in elderly women with confirmed urge **incontinence**. An open-label, single-blind pilot study was conducted in which an estradiol transdermal therapeutic system (TTS) alone, or combined with naproxen 250-mg tablets twice daily, or placebo TTS were given according to a randomized, crossover design for a period of 8 wk. Cystometric examn. was performed after each medication session. A washout period of 2 wk followed each medication session. Bladder-diary charts were completed by each patient and evaluated as a subjective measure of that patient's symptoms esp. with regard to frequency of urination, nocturia, and episodes of **incontinence**. Sixteen participants completed the study.
 Estradiol TTS as well as estradiol TTS plus naproxen increased bladder capacity significantly ($P < 0.05$) when compared with placebo. The vol. at which the first urge to void was perceived was increased significantly ($P = 0.01$) by estradiol TTS plus naproxen compared with placebo. These results suggest that estrogen alleviates urge **incontinence**.
 ST estradiol naproxen urine urge **incontinence**
 IT Bladder
 (disease, **incontinence**, urge; effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)
 IT Pharmaceutical dosage forms
 (transdermal, effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)
 IT 50-28-2, Estradiol, biological studies 22204-53-1, Naproxen
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)

=> s 18 and 125
 L30 2 L8 AND L25

=> d 130 1-2

L30 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
 AN 1998:534795 CAPLUS
 DN 129:153255
 TI Controlled-release formulations for treating early morning pathologies
 IN Busetti, Cesare; Crimella, Tiziano
 PA Poli Industria Chimica Spa, Italy
 SO U.S., 9 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|-------|----------|-----------------|----------|
| ----- | ----- | ----- | ----- | ----- |
| PI US 5788987 | A | 19980804 | US 1997-790514 | 19970129 |

| | | | | |
|---------------------|--|----------|----------------|----------|
| WO 9832425 | A1 | 19980730 | WO 1997-IB1632 | 19971216 |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| AU 9853356 | A1 | 19980818 | AU 1998-53356 | 19971216 |
| EP 954292 | A1 | 19991110 | EP 1997-950352 | 19971216 |
| R: | BE, DE, ES, FR, GB, PT | | | |
| JP 2001511126 | T2 | 20010807 | JP 1998-531769 | 19971216 |
| PRAI US 1997-790514 | A | 19970129 | | |
| WO 1997-IB1632 | W | 19971216 | | |

L30 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
AN 1998:175910 CAPLUS
DN 128:217188
TI Preparation of nitric ester derivatives and their use in urinary incontinence and other diseases
IN Del Soldato, Piero; Sannicolo', Francesco
PA Nicox S.A., Fr.; Del Soldato, Piero; Sannicolo', Francesco
SO PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|--|----------|-----------------|----------|
| PI WO 9809948 | A2 | 19980312 | WO 1997-EP4774 | 19970902 |
| WO 9809948 | A3 | 19980604 | | |
| W: | AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| AU 9743010 | A1 | 19980326 | AU 1997-43010 | 19970902 |
| AU 729533 | B2 | 20010201 | | |
| EP 931065 | A2 | 19990728 | EP 1997-919021 | 19970902 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, SI, LT, FI, RO | | | |
| BR 9712008 | A | 19990824 | BR 1997-12008 | 19970902 |
| CN 1234792 | A | 19991110 | CN 1997-199130 | 19970902 |
| JP 2000517332 | T2 | 20001226 | JP 1998-512226 | 19970902 |
| PRAI IT 1996-MI1821 | A | 19960904 | | |
| WO 1997-EP4774 | W | 19970902 | | |
| OS MARPAT 128:217188 | | | | |

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(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

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|----|--------------------|
| L1 | 51 S INDOMETHACIN |
| L2 | 75 S NAPROXEN |
| L3 | 6 S NIMESULIDE |
| L4 | 13 S NITROGLYCERIN |
| L5 | 443 S NITRIC OXIDE |

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002
E MICTURITION
L6 861 S E3-E6
E BLADDER
L7 24458 S E3
E INCONTINENCE
L8 2013 S E3-E7
E URINARY
L9 107957 S E3
L10 6048 S L4
L11 76683 S L5
L12 1 S L6 AND L10
L13 27 S L6 AND L11
E DETRUSOR
L14 966 S E3-E6
L15 1 S L14 AND L10
L16 38 S L14 AND L11
L17 31 S L16 NOT L13
L18 10 S L8 AND L10
L19 21 S L8 AND L11
L20 16 S L19 NOT L18
L21 757 S L9 AND L11
L22 3 S L21 AND L1
L23 12239 S L1
L24 7053 S L2
L25 553 S L3
L26 17 S L23 AND L14
L27 0 S L24 AND L14
L28 0 S L25 AND L14
L29 3 S L8 AND L24
L30 2 S L8 AND L25

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---Logging off of STN---

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Executing the logoff script...

=> LOG Y

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|--|------------------|---------------|
| FULL ESTIMATED COST | 163.83 | 199.02 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE | -9.29 | -9.29 |

STN INTERNATIONAL LOGOFF AT 13:26:59 ON 17 OCT 2002

AN 110:185899 CA
TI Pharmacological studies on the micturition reflex (2). Effects of various drugs on bladder and urethral functions in rats and dogs
AU Morikawa, Koji; Kakiuchi, Masato; Yamauchi, Tosie; Hashimoto, Shigeki; Miyashita, Naoshi; Sawada, Youko; Kato, Hideo; Ito, Yasuo
CS Cent. Res. Lab., Hokuriku Seiyaku Co., Ltd., Katsuyama, 911, Japan
SO Oyo Yakuri (1989), 37(1), 27-37
CODEN: OYYAA2; ISSN: 0300-8533
DT Journal
LA English
CC 1-11 (Pharmacology)
Section cross-reference(s): 2
AB This study was undertaken in an attempt to examine the effects on the cystometrogram of i.v. administration of twelve drugs which influence the rhythmic bladder contraction in anesthetized rats and the effects on urethral pressure in both anesthetized rats and dogs. In the cystometrogram of both rats and dogs, thiopental, diazepam, baclofen, morphine, clonidine, verapamil, indomethacin, lidocaine and flavoxate (considered to act directly on the micturition centers in the sacral cord and/or brain stem or the bladder mechanoreceptors) increased the time required to cause micturition and the pressure threshold. Isoproterenol, which is thought to act indirectly on the bladder mechanoreceptors by suppressing the bladder tonus, increased the bladder capacity, but did not increase the pressure threshold. Atropine and hexamethonium, considered to act on the muscarinic receptors in the pelvic ganglion, suppressed the amplitude of the micturition contraction, but did not increase the bladder capacity or pressure threshold. On the other hand, clonidine, hexamethonium and isoproterenol decreased the maximal urethral pressure in dogs, but no other drugs had any effect on the pressure. The effect of clonidine was inhibited by bilateral transections of the hypogastric nerves; this suggests that clonidine acts on the urethral smooth muscle through the central nervous system.
ST micturition reflex drug; bladder function drug; urethra function drug
IT Bladder
Urethra
(function of, drugs effect on, micturition reflex in)
IT Reflex
(micturition, drugs effect on, bladder and urethra function in)
IT 51-55-8, Atropine, biological studies 52-53-9, Verapamil 53-86-1, Indomethacin 57-27-2, Morphine, biological studies 60-25-3, Hexamethonium chloride 76-75-5, Thiopental 137-58-6, Lidocaine 439-14-5, Diazepam 1134-47-0, Baclofen 4205-90-7, Clonidine 7683-59-2, Isoproterenol 15301-69-6, Flavoxate
RL: BIOL (Biological study)
(micturition reflex response to, bladder and urethra function in)
IT 51-45-6, Histamine, biological studies 58-73-1, Diphenhydramine 59-42-7, 1-Phenylephrine 60-31-1, Acetylcholine chloride 146-48-5, Yohimbine 551-11-1, Prostaglandin F2.alpha. 971-74-4, Serotonin creatinine sulfate 19216-56-9, Prazosin
RL: BIOL (Biological study)
(micturition reflex response to, urethra function response in)

AN 1996:447425 CAPLUS
DN 125:105692
TI Effects of nitric oxide on **detrusor** relaxation
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl
CS College Medicine, Yonsei University, Seoul, S. Korea
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093
CODEN: JOURAA; ISSN: 0022-5347
PB Williams & Wilkins
DT Journal
LA English
CC 2-8 (Mammalian Hormones)
AB This study was designed to characterize the effect of NO, exploiting the photo-induced adequate NP (PIANO) system, on rat **detrusor** relaxation by isometric tension recording and measuring changes in cGMP content. Exposure to UV light was used (1-60 s) to evoke PIANO in the presence of streptozotocin, an NO carrier, and N.omega.-nitro-L-arginine (L-NOARG), an NO₂ -carrier. During relaxation the cGMP content was measured by RIA. Rat **detrusor** strips were reversibly relaxed upon NO generation via PIANO. Pyrogallol, an O₂ generator, significantly diminished PIANO-mediated relaxation. During PIANO-mediated relaxation, the tissue level of cGMP significantly increased over that of the control. Furthermore, methylene blue, a guanylate cyclase inhibitor, significantly inhibited both the relaxation and the increase of cGMP. Thus, the rat **detrusor** muscle is capable of responding to NO, and these findings might lead to a treatment for bladder instability and **detrusor** hyperreflexia by the use of intravesical instillation of NO donors.
ST nitric oxide **detrusor** muscle relaxation; bladder relaxation cGMP
nitric oxide
IT Bladder
 (**detrusor** muscle, effects of nitric oxide on **detrusor**
 muscle relaxation and cGMP)
IT 7782-44-7, Oxygen, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (effects of nitric oxide and oxygen on **detrusor** muscle
 relaxation and cGMP)
IT 10102-43-9, Nitric oxide, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (effects of nitric oxide on **detrusor** muscle relaxation and
 cGMP)
IT 7665-99-8, CGMP
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
 (effects of nitric oxide on **detrusor** muscle relaxation and
 cGMP)

=>

AN 1996:447425 CAPLUS
DN 125:105692
TI Effects of nitric oxide on **detrusor** relaxation
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl
CS College Medicine, Yonsei University, Seoul, S. Korea
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093
CODEN: JOURAA; ISSN: 0022-5347
PB Williams & Wilkins
DT Journal
LA English
CC 2-8 (Mammalian Hormones)
AB This study was designed to characterize the effect of NO, exploiting the photo-induced adequate NP (PIANO) system, on rat **detrusor** relaxation by isometric tension recording and measuring changes in cGMP content. Exposure to UV light was used (1-60 s) to evoke PIANO in the presence of streptozotocin, an NO carrier, and N.omega.-nitro-L-arginine (L-NOARG), an NO₂ -carrier. During relaxation the cGMP content was measured by RIA. Rat **detrusor** strips were reversibly relaxed upon NO generation via PIANO. Pyrogallol, an O₂ generator, significantly diminished PIANO-mediated relaxation. During PIANO-mediated relaxation, the tissue level of cGMP significantly increased over that of the control. Furthermore, methylene blue, a guanylate cyclase inhibitor, significantly inhibited both the relaxation and the increase of cGMP. Thus, the rat **detrusor** muscle is capable of responding to NO, and these findings might lead to a treatment for bladder instability and **detrusor** hyperreflexia by the use of intravesical instillation of NO donors.
ST nitric oxide **detrusor** muscle relaxation; bladder relaxation cGMP
nitric oxide
IT Bladder
 (**detrusor** muscle, effects of nitric oxide on **detrusor**
 muscle relaxation and cGMP)
IT 7782-44-7, Oxygen, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (effects of nitric oxide and oxygen on **detrusor** muscle
 relaxation and cGMP)
IT 10102-43-9, Nitric oxide, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (effects of nitric oxide on **detrusor** muscle relaxation and
 cGMP)
IT 7665-99-8, CGMP
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
 (effects of nitric oxide on **detrusor** muscle relaxation and
 cGMP)

=>

AN 1992:445429 CAPLUS
DN 117:45429
TI Nitric oxide and relaxation of pig lower urinary tract
AU Persson, Katarina; Andersson, Karl Erik
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.
SO British Journal of Pharmacology (1992), 106(2), 416-22
CODEN: BJPCBM; ISSN: 0007-1188
DT Journal
LA English
CC 13-6 (Mammalian Biochemistry)
AB The authors studied the non-adrenergic, non-cholinergic (NANC) nerve-mediated relaxation induced by elec. stimulation in pig isolated lower urinary tract smooth muscle, and the possible involvement of the L-arginine (L-ARG)/nitric oxide (NO) pathway in this response. Trigonal strips, precontracted by noradrenaline (NA), carbachol, or endothelin-1 (ET-1), relaxed frequency-dependently in response to elec. stimulation. Max. relaxation was obtained at 6-8 Hz, and amounted to 56, 77, and 62% of the agonist-induced tension in prepns. contracted by NA, carbachol, or ET-1, resp. Exposure to NG-nitro-L-arginine (L-NOARG; 10⁻⁷-10⁻⁵ M) concn.-dependently reduced the relaxant response in prepns. contracted by NA. L-NOARG (10⁻⁶ M) reduced the maximal response to 51% of control. L-NOARG (10⁻⁵ M) abolished all relaxation, and unmasked a contractile component; D-NOARG had no effect. Also in trigonal prepns., where the tension had been raised by carbachol or ET-1, L-NOARG (10⁻⁵ M) markedly reduced relaxations evoked by elec. stimulation. In trigonal prepns. contracted by NA, maximal relaxation was increased after pretreatment with L-ARG (10⁻³ M), and the inhibitory effect of L-NOARG (10⁻⁶ M) was prevented. Incubation of the trigonal strips with methylene blue had no effect on relaxations elicited at frequencies <6 Hz, but a small inhibition was obsd. at higher frequencies. Administration of NO (present in acidified soln. of NaNO₂) induced concn.-dependent relaxations in trigonal prepns. contracted by NA, carbachol, or ET-1. L-NOARG (10⁻⁵ M) and L-ARG (10⁻³ M) had no effect on these relaxations. However, methylene blue (10⁻⁵ M) shifted the concn.-response curve for NO to the right. NANC-relaxation and NO-induced relaxation of trigonal prepns. were both inhibited by oxyHb (10⁻⁵ M) and pyrogallol (10⁻⁴ M). In urethral prepns. precontracted by NA, elec. stimulation caused frequency-dependent relaxations. A max. relaxation of 73% was obtained at 10 Hz. Also in the urethra, NANC-relaxation was blocked by L-NOARG (10⁻⁵ M), and a contractile response generally appeared. **Detrusor** strips treated with .alpha.-.beta. methylene ATP (10⁻⁵ M) and atropine (10⁻⁶ M), and then contracted by ET-1, showed relaxations (19% of the induced tension) in response to elec. field stimulation (2-20 Hz) only when the tension was high. No response at all, or small contractions, were found in response to elec. stimulation in K⁺ (35 mM)-contracted **detrusor** strips. **Detrusor** prepns. contracted by carbachol were concn.-dependently relaxed by exogenously administered NO, SIN-1 (NO-donor), and isoprenaline, whereas vasoactive intestinal polypeptide had minor effects. NO and SIN-1 induced maximal relaxations of 63 and 70%, resp., of the tension induced by carbachol. Isoprenaline produced an almost complete relaxation (96%). Thus, NANC-nerve mediated relaxation, involving the L-ARG/NO pathway, can be demonstrated consistently in the pig trigonal and urethral, but not in **detrusor** smooth muscle.
ST nitric oxide urinary tract muscle
IT Urethra
 (relaxation of smooth muscle of, nonadrenergic-noncholinergic neurotransmission-induced, nitric oxide in)
IT Neuromuscular transmission
 (nonadrenergic-noncholinergic, urinary tract smooth muscle relaxation induction by, nitric oxide in)
IT Bladder
 (trigone, relaxation of smooth muscle of, nonadrenergic-noncholinergic

neurotransmission-induced, nitric oxide in)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
(in nonadrenergic-noncholinergic neurotransmission-induced relaxation
of urinary tract smooth muscle)

=>

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN
L2 75 S NAPROXEN
L3 6 S NIMESULIDE
L4 13 S NITROGLYCERIN
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION
L6 861 S E3-E6
E BLADDER
L7 24458 S E3
E INCONTINENCE
L8 2013 S E3-E7
E URINARY
L9 107957 S E3
L10 6048 S L4
L11 76683 S L5
L12 1 S L6 AND L10
L13 27 S L6 AND L11
E DETRUSOR
L14 966 S E3-E6
L15 1 S L14 AND L10
L16 38 S L14 AND L11
L17 31 S L16 NOT L13
L18 10 S L8 AND L10
L19 21 S L8 AND L11
L20 16 S L19 NOT L18
L21 757 S L9 AND L11
L22 3 S L21 AND L1

=>

DN 125:82655
TI Characterization of nitric oxide synthase activity in sheep urinary tract: functional implications
AU Garcia-Pascual, A.; Costa, G.; Labadia, A.; Persson, K.; Triguero, D.
CS Faculty of Veterinary Sciences, Complutense University, Madrid, 28040, Spain
SO British Journal of Pharmacology (1996), 118(4), 905-914
CODEN: BJPCBM; ISSN: 0007-1188
PB Stockton
DT Journal
LA English
CC 13-1 (Mammalian Biochemistry)
AB To define further the role of NO in urinary tract function, the authors measured the presence of nitric oxide synthase (NOS) activity, and its relation with functional NO-mediated responses to elec. field stimulation (EFS) in the urethra, the bladder detrusor muscle, and the ureter from sheep. NOS activity was assayed by the conversion of L-[14C]-arginine to L-[14C]-citrulline. Endogenous prodn. of citrulline was confirmed by TLC. NOS activity was detected in the cytosolic fraction from tissue homogenates with the following regional distribution (pmol citrulline/mg protein/min): urethra (33 .+- .3.3), detrusor (13.1 .+- .1.1) and ureter (1.5 .+- .0.2). No activity was detected in the particulate fraction of any region. NOS activity was dependent on Ca²⁺-calmodulin and required exogenously added NADPH and tetrahydrobiopterin (BH4) for maximal activity. Exclusion of calmodulin from the incubation mixt. did not modify NOS activity, but it was significantly reduced in the presence of the calmodulin antagonist, calmidazolium, suggesting the presence of enough endogenous calmodulin to sustain the obsd. NOS activity. NOS activity was inhibited to a greater extent by NG-nitro-L-arginine (L-NOARG) and its Me ester (L-NAME) than by NG-monomethyl-L-arginine (L-NMMA), whereas 7-nitroindazole (7-NI) was a weak inhibitor, and L-canavanine had no effect. Citrulline formation could be inhibited by superoxide dismutase in an oxyHb-sensitive manner, suggesting feedback inhibition of NOS by NO. EFS induced prominent NO-mediated relaxations in the urethra, whereas minor or no responses were obsd. in the detrusor and the ureter, resp. Urethral relaxations to EFS were inhibited by NOS inhibitors with the rank order of potency: L-NOARG = L-NAME > 7-NI > L-NMMA. Thus, the presence of NO-synthesizing enzyme activity in the sheep urinary tract was demonstrated which showed similar characteristics to the constitutive NOS isoform found in brain. It is suggested that the enzymic activity measured in the urethral muscle layer may account for the NO-mediated urethral relaxation during **micturition**, whereas regulation of detrusor and ureteral motor function by NOS-contg. nerves is less likely.
ST nitric oxide synthase distribution urinary tract
IT Ureter
IT Urethra
 (distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)
IT Bladder
 (detrusor muscle, distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)
IT **125978-95-2**, Nitric oxide synthase
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
 (distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)

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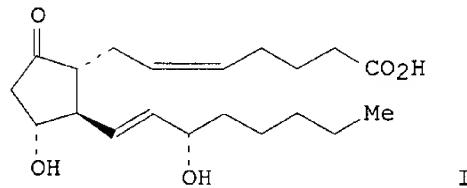
AN 1992:77163 CAPLUS
DN 116:77163
TI Inhibition of the arginine/nitric oxide pathway causes bladder hyperactivity in the rat
AU Persson, K.; Igawa, Y.; Mattiasson, A.; Andersson, K. E.
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.
SO Acta Physiologica Scandinavica (1992), 144(1), 107-8
CODEN: APSCAX; ISSN: 0001-6772
DT Journal
LA English
CC 2-10 (Mammalian Hormones)
Section cross-reference(s): 14
AB The present expts. demonstrate that inhibition of the L-arginine/nitric oxide pathway leads to bladder hyperactivity and decreased bladder capacity. This suggests that continuous activity in this pathway is one of the factors keeping the bladder relaxed during filling. The NANC-mediated relaxant response to elec. stimulation found previously in vitro in the trigone and the urethra of several species, but not in the **detrusor** muscle, may reflect the localization of such activity, and lends support to the view that bladder hyperactivity (unstable **detrusor** contractions) may be initiated from the bladder outlet region.
ST bladder hyperactivity arginine nitric oxide control
IT Bladder
 (disease, hyperactivity, arginine/nitric oxide pathway in pathophysiol.
 of)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
 (arginine pathway, in control of bladder hyperactivity, pathophysiol.
 in relation to)
IT 74-79-3, L-Arginine, biological studies
RL: BIOL (Biological study)
 (nitric oxide pathway, in control of bladder hyperactivity,
 pathophysiol. in relation to)

DN 118:252196
TI Partial mediation by nitric oxide of the relaxation of human isolated **detrusor** strips in response to electrical field stimulation
AU James, M. J.; Birmingham, A. T.; Hill, S. J.
CS Med. Sch., Univ. Nottingham, Nottingham, NG7 2UH, UK
SO British Journal of Clinical Pharmacology (1993), 35(4), 366-72
CODEN: BCPHBM; ISSN: 0306-5251
DT Journal
LA English
CC 13-6 (Mammalian Biochemistry)
AB A method for reproducing relaxation of human isolated **detrusor** smooth muscle in vitro in response to elec. field stimulation is described. The parameters of stimulation assocd. with relaxation were those which would be expected to give a largely nerve-mediated response: the relaxations were not reduced by tetrodotoxin (3 .times. 10⁻⁷ M) and were therefore not dependent on voltage sensitive sodium channels. The relaxations were decreased (mean 74.1%) by nitro L-arginine (NOARG, 10⁻⁵ M). Methylene blue (10⁻⁵ M), an inhibitor of sol. guanylate cyclase, abolished the relaxations. These results indicate that there may be a relaxation mechanism in the human bladder which is at least partly mediated via the prodn. of nitric oxide.
ST nitric oxide **detrusor** muscle bladder relaxation
IT Bladder
 (relaxation in, nitric oxide mediation of)
IT Bladder
 (**detrusor** muscle, nitric oxide mediation of relaxation of, in human bladder)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
 (role in human bladder relaxation)

AN 1996:447425 CAPLUS
DN 125:105692
TI Effects of nitric oxide on **detrusor** relaxation
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl
CS College Medicine, Yonsei University, Seoul, S. Korea
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093
CODEN: JOURAA; ISSN: 0022-5347
PB Williams & Wilkins
DT Journal
LA English
CC 2-8 (Mammalian Hormones)
AB This study was designed to characterize the effect of NO, exploiting the photo-induced adequate NP (PIANO) system, on rat **detrusor** relaxation by isometric tension recording and measuring changes in cGMP content. Exposure to UV light was used (1-60 s) to evoke PIANO in the presence of streptozotocin, an NO carrier, and N.omega.-nitro-L-arginine (L-NOARG), an NO₂ -carrier. During relaxation the cGMP content was measured by RIA. Rat **detrusor** strips were reversibly relaxed upon NO generation via PIANO. Pyrogallol, an O₂ generator, significantly diminished PIANO-mediated relaxation. During PIANO-mediated relaxation, the tissue level of cGMP significantly increased over that of the control. Furthermore, methylene blue, a guanylate cyclase inhibitor, significantly inhibited both the relaxation and the increase of cGMP. Thus, the rat **detrusor** muscle is capable of responding to NO, and these findings might lead to a treatment for bladder instability and **detrusor** hyperreflexia by the use of intravesical instillation of NO donors.
ST nitric oxide **detrusor** muscle relaxation; bladder relaxation cGMP
nitric oxide
IT Bladder
 (**detrusor** muscle, effects of nitric oxide on **detrusor**
 muscle relaxation and cGMP)
IT 7782-44-7, Oxygen, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (effects of nitric oxide and oxygen on **detrusor** muscle
 relaxation and cGMP)
IT 10102-43-9, Nitric oxide, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (effects of nitric oxide on **detrusor** muscle relaxation and
 cGMP)
IT 7665-99-8, CGMP
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
 (effects of nitric oxide on **detrusor** muscle relaxation and
 cGMP)

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DN 88:146643
TI Interactions of calcium, prostaglandins and indomethacin on the smooth muscle of the bladder
AU Anderson, Gordon F.; Kohn, Kenneth I.
CS Dep. Pharmacol., Wayne State Univ. Sch. Med., Detroit, Mich., USA
SO Pharmacology (1978), 16(6), 306-13
CODEN: PHMGBN; ISSN: 0031-7012
DT Journal
LA English
CC 2-5 (Hormone Pharmacology)
GI



AB The effects of PGE2 (I) [363-24-6], PGF2. α . [551-11-1] and indomethacin (II) [53-86-1] were studied on isolated rabbit detrusor smooth muscle strips in balanced salt soln. and in 80 mM K $^{+}$ depolarizing soln. The addn. of II to the smooth muscle prepns. at 0.1-1.0 μ M produced depression of spontaneous motility that was partially antagonized by I or by elevating the extracellular Ca $^{2+}$ level. Alone, both I and Ca $^{2+}$ caused a marked increase in motility, increasing both frequency and amplitude. In low Ca $^{2+}$, K $^{+}$ depolarized bathing medium with 0.1 mM EGTA added, I or PGF2. α . augmented Ca $^{2+}$ contractures both in velocity and amplitude, whereas either prostaglandin without Ca $^{2+}$ had no effect on the smooth muscle. II produced a noncompetitive antagonism of the Ca $^{2+}$ dose response curve in 80 mM K $^{+}$ depolarized prepns. suggesting a direct effect on Ca $^{2+}$ flux. II also depressed both prostaglandin and Ca $^{2+}$ contractures in terms of velocity and magnitude, suggesting that it may act at Ca $^{2+}$ channels in addn. to its action on prostaglandin synthetase. These data support the work of others who suggest that prostaglandins may augment Ca $^{2+}$ permeability, acting at the Ca $^{2+}$ channel or as carriers for Ca $^{2+}$ across smooth muscle cell membrane.

ST calcium indomethacin prostaglandin bladder

IT Bladder

(contraction of, calcium and indomethacin and prostaglandin interaction in)

IT 363-24-6 551-11-1

RL: BIOL (Biological study)

(bladder response to, calcium and indomethacin interaction in)

IT 53-86-1

RL: BIOL (Biological study)

(bladder response to, calcium and prostaglandins interaction in)

IT 7440-70-2, biological studies

RL: BIOL (Biological study)

(bladder response to, indomethacin and prostaglandins interaction in)

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AN 1995:980141 CAPLUS
DN 124:106940
TI The effects of an estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women: A pilot study
AU Blom, Marie W.; Sommers, De Clerk
CS Faculty Medicine, University Pretoria, Pretoria, 0001, S. Afr.
SO Current Therapeutic Research (1995), 56(10), 1100-4
CODEN: CTCEA9; ISSN: 0011-393X
PB Excerpta Medica
DT Journal
LA English
CC 2-4 (Mammalian Hormones)
Section cross-reference(s): 63
AB The aim of this study was to evaluate the effects of a transdermal estradiol delivery system, alone and in combination with naproxen, in elderly women with confirmed urge **incontinence**. An open-label, single-blind pilot study was conducted in which an estradiol transdermal therapeutic system (TTS) alone, or combined with naproxen 250-mg tablets twice daily, or placebo TTS were given according to a randomized, crossover design for a period of 8 wk. Cystometric examn. was performed after each medication session. A washout period of 2 wk followed each medication session. Bladder-diary charts were completed by each patient and evaluated as a subjective measure of that patient's symptoms esp. with regard to frequency of urination, nocturia, and episodes of **incontinence**. Sixteen participants completed the study. Estradiol TTS as well as estradiol TTS plus naproxen increased bladder capacity significantly ($P < 0.05$) when compared with placebo. The vol. at which the first urge to void was perceived was increased significantly ($P = 0.01$) by estradiol TTS plus naproxen compared with placebo. These results suggest that estrogen alleviates urge **incontinence**.
ST estradiol naproxen urine urge **incontinence**
IT Bladder
 (disease, **incontinence**, urge; effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)
IT Pharmaceutical dosage forms
 (transdermal, effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)
IT 50-28-2, Estradiol, biological studies 22204-53-1, Naproxen
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)

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AN 1993:509502 CAPLUS
DN 119:109502
TI Nitric oxide mediates nonadrenergic, noncholinergic relaxation of the smooth muscle sphincter of the urinary bladder
AU Thornbury, K. D.; Hollywood, M. A.; McHale, N. G.
CS Sch. Biomed. Sci., Queen's Univ., Belfast, BT9 7BL, UK
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,
Volume 1, 309-12. Editor(s): Moncada, Salvador. Publisher: Portland
Press, London, UK.
CODEN: 59AFA7
DT Conference
LA English
CC 2-8 (Mammalian Hormones)
AB The results of the present study demonstrate that nonadrenergic-noncholinergic (NANC) relaxation and after-contraction in the smooth muscle sphincter of the bladder depend on synthesis and release of NO or a closely related compd. The demonstration that relaxation of the internal sphincter is antagonized by the NO synthase inhibitor, L-NAME, provides an opportunity to assess the role of inhibitory NANC nerves in vivo, and may improve understanding of clin. conditions such as stress **incontinence**, urge **incontinence** and urinary retention.
ST bladder relaxation nonadrenergic noncholinergic nitric oxide
IT Bladder
 (nonadrenergic noncholinergic relaxation of, nitric oxide mediation of)
IT Nervous system
 (nonadrenergic-noncholinergic, bladder relaxation by, nitric oxide mediation of)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
 (nonadrenergic noncholinergic bladder relaxation mediation by)

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AN 1993:509502 CAPLUS
DN 119:109502
TI Nitric oxide mediates nonadrenergic, noncholinergic relaxation of the smooth muscle sphincter of the urinary bladder
AU Thornbury, K. D.; Hollywood, M. A.; McHale, N. G.
CS Sch. Biomed. Sci., Queen's Univ., Belfast, BT9 7BL, UK
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991, Volume 1, 309-12. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.
CODEN: 59AFA7
DT Conference
LA English
CC 2-8 (Mammalian Hormones)
AB The results of the present study demonstrate that nonadrenergic-noncholinergic (NANC) relaxation and after-contraction in the smooth muscle sphincter of the bladder depend on synthesis and release of NO or a closely related compd. The demonstration that relaxation of the internal sphincter is antagonized by the NO synthase inhibitor, L-NAME, provides an opportunity to assess the role of inhibitory NANC nerves in vivo, and may improve understanding of clin. conditions such as stress **incontinence**, urge **incontinence** and urinary retention.
ST bladder relaxation nonadrenergic noncholinergic nitric oxide
IT Bladder
 (nonadrenergic noncholinergic relaxation of, nitric oxide mediation of)
IT Nervous system
 (nonadrenergic-noncholinergic, bladder relaxation by, nitric oxide mediation of)
IT 10102-43-9, Nitric oxide, biological studies
RL: BIOL (Biological study)
 (nonadrenergic noncholinergic bladder relaxation mediation by)

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AN 1996:551707 CAPLUS
DN 125:239097
TI The effect of NG-monomethyl-L-arginine on bladder function
AU Theobald, Robert J. Jr.
CS Department of Pharmacology, Kirksville College of Osteopathic Medicine,
800 West Jefferson Street, Kirksville, Kirksville, USA
SO European Journal of Pharmacology (1996), 311(1), 73-78
CODEN: EJPHAZ; ISSN: 0014-2999
PB Elsevier
DT Journal
LA English
CC 2-8 (Mammalian Hormones)
Section cross-reference(s): 13
AB Recent studies have demonstrated the presence of nitric oxide synthase (NO synthase) in lower urinary tract tissues, however, its role in the detrusor is unclear. The current study was designed to det. if NO synthase inhibition alters detrusor activities, including **micturition** vol. threshold, and inhibition of pelvic nerve-evoked contractions by various stimuli. In naive, anesthetized adult cats, inhibition of pelvic nerve-evoked bladder contractions, induced by hypogastric nerve stimulation or the intraarterial administration of NA, ATP, adenosine, .beta.,.gamma.-methylene ATP and 2-methylthio ATP, was measured before and after inhibition of NO synthase. The **micturition** vol. threshold was also measured before and after NO synthase inhibition. L-NMMA decreased the **micturition** vol. threshold by 38% (2 mg intravesical administration) or 80% (4 mg/kg i.a.). The magnitude of the **micturition** contractions was modestly increased. These results, and information in the literature, indicate that NO may play a role in the collection phase of the bladder cycle and any alteration of nitric oxide availability could induce or allow development of various bladder malfunctions, such as small bladder diseases, like interstitial cystitis.
ST nitric oxide synthase bladder function
IT Bladder
 (nitric oxide synthase role in bladder function)
IT 10102-43-9, Nitric oxide, biological studies 125978-95-2
 , Nitric oxide synthase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (nitric oxide synthase role in bladder function)

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AN 1996:551707 CAPLUS
DN 125:239097
TI The effect of NG-monomethyl-L-arginine on bladder function
AU Theobald, Robert J. Jr.
CS Department of Pharmacology, Kirksville College of Osteopathic Medicine,
800 West Jefferson Street, Kirksville, Kirksville, USA
SO European Journal of Pharmacology (1996), 311(1), 73-78
CODEN: EJPHAZ; ISSN: 0014-2999
PB Elsevier
DT Journal
LA English
CC 2-8 (Mammalian Hormones)
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AB Recent studies have demonstrated the presence of nitric oxide synthase (NO synthase) in lower urinary tract tissues, however, its role in the detrusor is unclear. The current study was designed to det. if NO synthase inhibition alters detrusor activities, including **micturition** vol. threshold, and inhibition of pelvic nerve-evoked contractions by various stimuli. In naive, anesthetized adult cats, inhibition of pelvic nerve-evoked bladder contractions, induced by hypogastric nerve stimulation or the intraarterial administration of NA, ATP, adenosine, .beta.,.gamma.-methylene ATP and 2-methylthio ATP, was measured before and after inhibition of NO synthase. The **micturition** vol. threshold was also measured before and after NO synthase inhibition. L-NMMA decreased the **micturition** vol. threshold by 38% (2 mg intravesical administration) or 80% (4 mg/kg i.a.). The magnitude of the **micturition** contractions was modestly increased. These results, and information in the literature, indicate that NO may play a role in the collection phase of the bladder cycle and any alteration of nitric oxide availability could induce or allow development of various bladder malfunctions, such as small bladder diseases, like interstitial cystitis.
ST nitric oxide synthase bladder function
IT Bladder
 (nitric oxide synthase role in bladder function)
IT 10102-43-9, Nitric oxide, biological studies 125978-95-2
 , Nitric oxide synthase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (nitric oxide synthase role in bladder function)

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